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TRANSACTIONS

OF THE

HOMŒOPATHIC MEDICAL SOCIETY

OF THE

STATE OF NEW YORK,

FOR THE YEARS 1880 AND 1881.

VOLUME XVI. (No. VI., N. S.)

HAVANA, N. Y.:
L. E. KEYSER AND COMPANY.
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HOMŒOPATHIC MEDICAL SOCIETY
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I.

Proceedings of the Twenty-eighth Semi-Annual Meeting held at Rochester, N. Y., September 9th and 10th, 1879,

The President, Asa S. Couch, M. D., of Fredonia, called the meeting to order at 10 o'clock A. M., and introduced the Rev. H. C. Riggs, who offered prayer.

The President said he proposed, if his life was spared, to make a formal communication, at the next annual meeting, and congratulated the members on the prosperity of the Society, and hoped that harmony would continue to exist.

Drs. Talcott, of Middletown, and Fowler, of Rochester, were appointed a committee on credentials.

The Corresponding Secretary read a communication from Dr. C. T. Harris.

Communications were read by the Recording Secretary from Drs. A. K. Hills, J. J. Mitchell, C. Th. Liebold and Robert Boocock, expressing the regrets of the writers at their inability to be present.

The Secretary stated that no report had been received from the Bureau of Education.

Under the report of the Bureau of Vaccination, Dr. N. Osborne, of Buffalo, read a paper entitled: "Should a United States Law be Enacted Making Vaccination Compulsory?"

The paper entitled: "Superiority of Cow Pox over Humanized Virus, and the Best Method of Introduction into the Human System," by C. J. Farley, M. D., was read by title.

The Committee on Credentials reported the following physicians as present:

Drs. Asa S. Couch, E. Hasbrouck, A. R. Wright, N. Osborne, Geo. W. Lewis, W. B. Kenyon, D. B. Stumpf, G. R. Stearns, F. Park Lewis, Anna C. Howland, L. W. Seymour, H. Learned, C. C. Curtis, M. J. Lincoln, P. A. Mc Crea, H. Robinson, H. L. Waldo, H. M. Dayfoot, B. P. Andrews, J. A. West, J. F. M. Whitcomb, J. W. Buell, C. W. Baker, T. D. Spencer, P. G. Clark, Geo. A. Heath, L. H. Reynolds, C. Sumner, W. P. Fowler, A. M. Bennett, A. B. Carr, T. C. White, R. A. Adams, W. Doolittle, W. V. R. Blighton, R. S. Bishop, A. J. Evans, F. S. Welch, S. P. Burdick, A. H. Burdick, C. A. Bacon, H. C. Houghton, Henry M. Smith, J. W. Dowling, A. W. Lozier; Jennie de la M. Lozier, Walter Y. Cowl, Geo. Allen, F. A. Bishop, A. B. Southwick, W. C. Doane, W.

Bell, N. B. Covert, G. Z. Noble, C. D. Hale, J. H. Chamberlain, S. H. Talcott, N. Emmons Paine, O. E. Pratt, E. S. Coburn, F. W. Adriance, A. P. Hollett, E. W. Rogers, A. J. Frantz, R. B. Covert, H. A. Whitfield, B. F. Grant, B. F. Williamson, R. Tallmadge, Alex. G. Austin, J. C. Mc Pherson, H. P. Van Dusen. Seventy-two in all.

The Bureau of Vital Statistics had no report to present.

A paper entitled: "Ventilation of Soil and Waste Pipes, and Under-Drains," by H. M. Paine, M. D., was read by N. E. Paine, M. D., of Middletown.

Prof. J. W. Dowling, of New York, said: There is probably scarcely a physician present who has not noticed in his practice, that sometimes two or three or four members of a family will escape the effects of malarial poisoning, while the others will be affected with it. Sometimes a number of children will be exposed to scarlet fever; one will be taken down, and the others escape.

In regard to the eminations from sewers, producing diphtheria, typhoid fever, etc., it has been a matter of considerable discussion in the City of New York and other places. In regard to the effect of sewer gas in producing diphtheria, an impression prevails that diphtheria is dependent upon sewer gas to a great extent. We have been unable to find a single instance of diphtheria in persons who have been working in the sewers themselves in New York. I think that unless the poison of that disease exists—it is utterly impossible for a person to contract it. Unless these gases have diphtheria germs, typhoid germs, or the germs of the small pox in them—it is impossible to contract these diseases. I do not believe they can be contracted from animal matter. I do not believe they can be contracted from sewer gas, unless the germs from some case of these diseases are present in the gas.

I arose to speak particularly in regard to the susceptibility of certain individuals to malarial poison, and the lack of susceptibility in others to it. The husband of my sister lived in a malarial section in New Jersey for many years, but, like many others, he was not willing to acknowledge that such a thing as malaria existed there. I knew that it did, from actual observation. He contracted a peculiar form of illness which he attributed to over mental work. I did not believe it arose from that, as he did no more than a man of ordinary health was capable of doing, but finally he died from the effects, as I think, of malarial poisoning, and not from over-work. What some attribute to smoking too many cigars, or over-working their brains, or obtaining too little physical rest, is in reality due to malarial poisoning.

Prof. Burdick, of New York: I concur in many of the remarks made by Prof. Dowling, but I think it is a very important matter, when we are seeking to free ourselves from some serious poison or malady that is upon us, that we do not mistake the cause and attempt to remove something that does not exist.

To my mind it seems very clear that much is laid to the door of sewer gas and other eminations of this kind that do not belong there. For ages we have had the influences of these gases escaping in all our cities and villages, and not until a recent date have we had the visitation of

diphtheria to the extent that we have at present. If we make a mistake and seek to eliminate the gases or the malaria that produces or induces diphtheria, typhoids, and other diseases, and leave the germs that actually produce the disease behind, we have made an expenditure of time, money, and brains to no effect.

It is a positive fact that in many of the rural districts where there are no sewers, where the houses are free from everything that would tend to contaminate the atmosphere with these gases, and during the winter when the ground is covered deeply with snow and frozen solid, we find in those localities that there these diseases are doing more harm and destroying more lives than they are in many of our crowded and infected cities. It is therefore important that we do not cover up the idea or the fact that these diseases which prevail, that these epidemics are not due to local causes as much as they are to general atmospheric conditions.

When we have an atmospheric condition that will induce common cholera, we will have cholera irrespective of bad ventilation or bad sewerage. While we cannot afford to lose sight of the fact that all these deleterious gases, escaping and being inhaled and becoming a part of our organism, demand removal, yet while we remove the influences that are increasing the liability to these diseases, we must seek for the actual cause and remove that, then we shall have a freedom, in my opinion, from any of the causes which are now producing so much devastation in our cities and elsewhere.

Paper, "Tumor of the Heart," by William E. Milbank, M. D., read by title.

Report of the Bureau of Histology.

Paper entitled: "The Mycetic Theory of Disease," by C. P. Alling, M. D., read by title.

Paper entitled: "Observations on the Urine and Urea," by T. C. Fanning, M. D., read by title.

Report of the Bureau of Otology.

Paper entitled: "A Condensed Report of Sixty-three Cases of Inspissated Cerumen," by William P. Fowler, M. D., of Rochester, was read.

On motion of Dr. Talcott, of Middletown, the visiting physicians were invited to take part in the discussion of the papers.

Paper by H. C. Houghton, M. D., of New York, entitled: "Value of Electricity in Diseases of the Ear," was read.

Dr. F. Park Lewis said: No amount of negative evidence can outweigh in the least that which is positive, but, after experimenting considerably for the last few years with Galvanism and with the Galvanic current, I regret to say I have not had the brilliant results which followed in the doctor's practice. And, indeed, in certain cases of chronic catarrh in the middle ear, I have seen decidedly bad results following the use of Galvanism as I used it, but I will say that I have not used the tongue electrode and perhaps it is for that reason that my success has been so limited.

I have been able to quiet the tinnitus, however, and I think the hearing has been improved, but in many cases I have failed to get the relief which the previous papers of the doctor before this Society have led me to expect.

Dr. Houghton: I feel somewhat as the sister in the Methodist Church felt when the leader told her she had better not testify beyond her experience. I do not wish to be understood that the results are as brilliant as perhaps the remarks of Dr. Lewis might indicate. Vast results come to an aurist who through years and years has tried one experiment. There can be no impression made upon him, and it is beyond any force, except Divine force, to obtain any result other than that required. But in many cases I am satisfied that Galvanism, together with the use of other medicines, will make changes that nothing else will. Among men of note in the profession, cases in which they have failed, have been relieved by the application of electricity in one form or another.

Dr. William P. Fowler, of Rochester: I have never found it necessary to resort to instruments in the removal of aural polypi. To remove mucous polypi, I use a saturated solutionof Bichromate of Potash. To remove fibrous polypi with a hypodermic syringe, I inject into the tumors a solution of Persulphate of Iron.

A paper was presented by F. Park Lewis, M. D., of Buffalo, entitled: "Acute Suppurative Inflammation of the Middle Ear."

Dr. Hollett, of Havana, moved that a committee of three be appointed to draft suitable resolutions in connection with the decease of members of the Society.

The resolution was adopted. The meeting adjourned to spend the afternoon in the enjoyment of the excursion to Irondequoit Bay.

The Excursion.

At an early hour in the afternoon the members of the Society met at the rooms to carry out the pleasant programme prepared by the excursion committee. The street cars conveyed the party to Buell Avenue, and at 2 o'clock the steamer, City of Rochester, left the landing with the physicians and their wives for a ride down the river. Owing to the rough state of the water, the steamer was left at Charlotte and the party took the cars for the Sea Breeze House, at the mouth of Irondequoit Bay. The bay steamer was taken there, and the party proceeded up the bay to the Newport House, where a very fine fish and game supper was served. Owing to the fact that a delay had been caused by an annoying sand bar in the bay, there was not time enough at the hotel to have many toasts and speeches. The cars of the Bay Railroad were taken for the return trip, and the party reached the city about an hour late. The arrangements were in the hands of the executive committee of the Monroe County Society, composed of Drs. Sumner, Bigler, Fowler, Doolittle, Carr and Adams. The two last named, Drs. Carr and Adams, were the active men of the committee in making the arrangements, and their efforts were highly approved by their guests.

EVENING SESSION.

Drs. A. P. Hollett, W. C. Doane, and A. R. Wright were appointed a committee on resolutions in regard to deceased members.

Dr. C. T. Liebold, of New York, being absent, his paper entitled: "Cotton," was read by the Secretary.

Dr. William P. Fowler, of Rochester, presented and read a paper entitled: "Myopia in our Public Schools."

Dr. F. Park Lewis, of Buffalo, said: "The subject of Dr. Fowler's paper is one of great importance. The result of the examination of one thousand pupils in the public schools of Buffalo indicates that the disease is rapidly increasing among school children. One out of every four graduating at the schools is myopic. The condition increases as the age of the pupil increases.

Myopia is a disease and not a natural condition of the eye, as is generally supposed by the ignorant public. The points mentioned in Dr. Fowler's paper are of importance; the light in school rooms is generally insufficient, and in Buffalo the walls are of a bad color, being white, whereas tinted walls would be preferable. The books are often badly printed. These are all points upon which the laity must be informed."

Dr. F. Park Lewis, of Buffalo, presented and read a paper entitled: "The Homœopathic Therapeutics of Trachoma."

The Bureau of Chimatology reported three papers through its chairman, Dr. A. R. Wright, of Buffalo.

Dr. N. B. Covert, of Geneva, presented and read a "Report of the Epidemic of Diphtheria in Geneva, and Chemical Analysis of the Water."

Dr. S. P. Burdick, of New York, wished to know if any different conditions of the soil etc., existed just previous to, or at the time of the epidemic from what had existed for years.

Dr. Covert: The village was in a better sanitary condition at that time than for years before. He thought the filth or water supply theory hardly tenable.

Dr. A. R. Wright thought the small stream running through the village might be a source of danger. It was used as a sewer, and being open, and dry part of the time, the evaporations from sewage must be both unpleasant and unhealthful.

Dr. Covert replied that dry seasons had occurred before, but there had been no epidemic of diphtheria. The creek was cleaned thoroughly by the Board of Health and sprinkled with Chloride of Lime; besides, the epidemic commenced more than a mile from the creek and spread all through the village.

Dr. Walter Y. Cowl, of New York, asked if impure water and air were not *predisposing* causes of the epidemic? Dr. Covert did not think so.

A paper by Dr. B. L. B. Bayliss, of Astoria, entitled: "Malarial Fever," was presented, also a report by the chairman of bureau on "Water Supply."

The following resolution was adopted:

Resolved, That this Society appoint a committee of one from each city of the State to report annually, or oftener if required, to the Chairman of the Bureau of Climatology, the kind, condition, and quality of the water supply of his city, and all the significant facts he can gather on the sanitary effects of said supply.

The Bureau of Gynæcology reported through its Chairman, Anna C. Howland, M. D., of Poughkeepsie.

A paper by Egbert Guernsey, M. D., of New York, entitled: "Abuse of Uterine Surgery," was read, also a paper by R. C. Moffat, M. D., of Brooklyn, entitled: "A New Hypogastric Bandage," and another by the same author, entitled: "Extreme Retroversion."

A paper by Malcolm Macfarlan, M. D., of Philadelphia, entitled: "Remedies in After Treatment of Ovariotomy," was read by title.

MORNING SESSION, SEPT. 10TH.

Under the report of the Bureau of Obstetrics, Dr. Sumner, of Rochester, read a paper entitled: "Myofibromata of the Uterus with Pregnancy."

Dr. Bacon, of New York: I would like to ask whether there was any microscopic examination made of the tissue of the tumor.

Dr. Sumner: There was not.

Paper read by Prof. S. P. Burdick, of New York, entitled: "Anæsthetics in Labor."

The President: On account of the great diversity of opinion in the profession with reference to the use of anæsthetics in labor, it is desirable that there be a free interchange of opinions in reference to the merits of this paper.

Dr. Bacon, of New York: I can indorse what was said in regard to the use of Chloroform, using it intermittently, and I refer to a case where there was no pain felt at all during six hours of pains occurring at the usual intervals, and a very little over a fluid ounce of Chloroform was used to allay the pain.

Dr. Osborne, of Buffalo: I would like to inquire at what stage of labor the doctor commences the use of Chloroform.

Dr. Burdick: In response to this question, I will answer that I usually commence the administration as soon as there begins to be considerable dilatation, and if the pain is very great, or if the pains are very cutting and very annoying, prior to this. I administer occasionally a few inhalations prior to this time. My object is to prevent the patient's suffering and thereby demoralizing, not only mentally but physically.

Dr. White of Harlem, N. Y: I was going to state to the doctor that if he commences the administration of Chloroform at the commencement of the labor, and his patient is in labor say eight hours, and he administers Chloroform at the beginning of each pain, and uses only half an ounce, I cannot quite understand how it is that both the pains and the Chloroform should hold out that length of time. It seems to me that one or the other should fail. I am surprised also that the effect of the Chloroform is so prompt at the beginning of the contraction of the womb as to deaden the pain entirely, and that it should go off so promptly and leave her free to converse during the interval, and then that the re-administration of it should work so nicely. It seems to work very nicely, but I do not quite understand it.

I have administered Chloroform myself, but I cannot keep it up from the commencement of labor, if it is at all tedious labor, and not use more than half an ounce, and if I use more than that, or any great quantity, then I am on the lookout for trouble with the child.

Prof. Burdick: I would ask the doctor, before responding to the question, what trouble he refers to with the child.

Dr. White: In my own practice, and in consultation with others, I have seen death resulting, without doubt in my own mind, from the administration of Chloroform to the mother.

Prof. Burdick: With reference to the holding out of the Chloroform and the pains, we do not want the pains to hold out, and therefore we subdue them by the smaller administrations of the Chloroform and allow the contractions to go on painless, or comparatively so, and if we have a case that extends over eight or ten hours, or a couple of days, we are compelled to use more Chloroform; but in normal cases where the contractions are accompanied with considerable pain extending over two or three or four hours, it is an easy matter to have the Chloroform hold out, subduing all or nearly all the pains during the active stage of labor. As to the danger to the fœtus, I fail to see wherein it can arise from any such administration of Chloroform. On the contrary, I have in numerous instances in difficult labors or preternaturally large children, had the patients for hours under the almost profound influence of Chloroform so that they recognized no sensation whatever, and have had no difficulty whatever with the children, they came into the world as lively as any I have ever assisted in bringing into this world, and it is only in those extreme cases of prolonged labor, where we may expect to find asphyxia in the child or in the fœtus, that we use the large quantities. This is not due to the Chloroform, but to long continued contraction and the shutting off of the Oxygen from the fœtus.

Dr. Bacon: Dr. White does not, it seems to me, take sufficient note of the fact that the use of the Chloroform is intermitting. At the moment that the first evidence of the contraction of the uterus is seen, the Chloroform is applied, and almost immediately the woman expresses her relief, and I have seen them again and again when the whole contraction went through without their loosing consciousness and without any pain. The woman is never brought into complete anæsthesia, but so much under the influence of the Chloroform as to relieve her pain.

Dr. Wright, of Buffalo: We are very much obliged for the careful preparation of this paper by Dr. Burdick, and I think he has presented the facts very carefully and conscientiously, and properly for the guidance of physicians. His use of Chloroform is pretty much the same as I have followed during nearly the same length of time. But he referred to to the more severe instrumental operations as requiring a greater use of Chloroform. That has not been my experience. I think, we can even use the forceps without Chloroform. I have not been any more likely to use the Chloroform with the use of the forceps than for the pains. That would not, in my experience be any more occasion for the use of Chloroform than the ordinary pains.

Dr. Burdick: I suspect that I was misunderstood. I referred to the severe instrumental operations. In the ordinary use of forceps, where there is perhaps tardiness or inefficiency of contraction, where the only difficulty lies in the power to expel the fœtus through a sufficiently large passage, or where the fœtus is unduly large. In those cases, I find no occasion for using more Chloroform than in the ordinary administration.

I agree perfectly with my colleague in that respect. It is only in those extreme cases, as in several instances which came under my observation, in which the smallest circumference of the head would reach as high as fifteen and a fourth or fifteen and a half inches. When a head of that size is to pass through a place which does not measure over twelve inches, it is a matter of great difficulty and suffering, unless the patient is under the influence of something so that she cannot realize it. It is in these extreme cases that I use the extreme anæsthesia.

Prof. Dowling: Let me ask Prof. Burdick, whether, in his experience, hemorrhage is more frequent after the use of Chloroform than when it has not been used?

Prof. Burdick: In response to this interrogation I can say, since I have been using Chloroform more freely, where I used it perhaps in three fourths of the cases, I have had fewer cases of hemorrhages than I did before that time, with a much larger number of cases: but I will say this, I have been impressed with the opinion that there should be greater care used in watching the contractions of the uterus after the delivery, where Chloroform or any anæsthetic has been used, than otherwise. I suspect, from my experience, that this is not a fact. My impression is that it is a bias which has been received in consequence of some preconceived opinion that it would be so. I am sustained in this opinion also from the fact that the contractions of the uterus are not materially influenced or affected, either during labor or after labor, by the use of Chloroform. That if the contractions will go on during labor with the use of the Chloroform, I can see no reason why the contractions of the uterus after the expulsion of the fœtus, should not be as prompt and efficient as when it was not used.

Prof. Dowling: Every case I have had of hemorrhage has been after the administration of large quantities of Chloroform, and it has been with great difficulty, in some instances, that I could control it, and in some instances the uterus contracted after the delivery and then expanded again. I bandaged my patient,—which I believe the doctor does not do, —and went to the other side of the room and looked over to her and saw that she was very pale, she said—"Doctor, I feel so strange." I went to her bed-side and put my hand on the abdomen and found everything soft. The tumor which was there before had gone, and I introduced my hand into the uterus. I had delivered the patient with instruments, and the uterus had contracted naturally, but it appeared suddenly to relax. Every case of profuse hemorrhage which I have had has been after the free use of Chloroform. I have used Chloroform and never saw any injurious effects where it has been given in small quantities, but the cases where I have had profuse hemorrhage have been after those large uses of Chloroform. If they beg very hard, I am in the habit of giving it in large quantities, but not voluntarily.

Prof. Burdick: If I understand Prof. Dowling correctly, the severe cases of hemorrhage which he has had, have been those cases where there has been the use of instruments. I suspect that the cases of hemorrhage which he refers to have been induced perhaps by the instrumental delivery rather than by the Chloroform. The shock sustained by the uterus, occasioned perhaps by the severe instrumental delivery, or by a sudden evacuation

of its contents, many times I have found would induce precisely the condition which Prof. Dowling refers to. First, the contraction, and then, from the enervating effects from the shock, a relaxation and hemorrhage. For these reasons, I make it a point always, in instrumental delivery, to make the delivery very slowly and with great moderation, allowing many times, as soon as the head of the fœtus approaches the outlet or has passed the obstruction point, to remove the forceps and allow nature to perform the balance of the labor herself. In this way the uterus becomes accustomed to continue her action, but in the sudden removing of the fœtus, many times the condition which Prof. Dowling refers to I have found to occur. The most serious cases of hemorrhage I have ever seen have been those where no anæsthetic was used whatever.

Dr. Van Dusen, of Newark: Will the Doctor give us his opinion in reference to its use in convulsions?

Dr. Burdick: This is a portion of the subject which I desired very much to incorporate in my paper, but knowing that the time allotted to each bureau would be limited, I did not desire to take up so much time. The use of Chloroform in convulsions I have found to be of inestimable value. In curable convulsions, those who are familiar with the changes which occur in the blood inducing convulsions, and the condition of the brain, will readily see the importance of preventing as much convulsive movement as possible. The blood being hydraemic, the contraction upon the blood vessels has a tendency to drive the blood to a point of the body which cannot be convulsed, and the head is the only part of the body that cannot be convulsed. Those who have witnessed the condition of the patients face during a convulsion will remember that it was full of blood. The brain was in the same condition, and consequently the importance of putting a ligature, as it were, upon the blood vessels that lead to the brain to prevent the turgescence and the œdema that occurs.

The President: The President thinks it his duty to recommend to the Society the greatest scrutiny of this subject since the mortality in our hospitals has increased since the introduction of Chloroform in the more important surgical operations.

A paper written by Robert Boocock, M. D., was read by Dr. Bacon, entitled, "Obstetrics."

The Committee on "Physical Diagnosis" was called to make its report.

Dr. J. W. Dowling: I have to apologize to the members of the Society for my non-appearance last evening.

I enjoyed to the fullest extent the entertainment of yesterday afternoon. and became so thoroughly exhausted and fatigued from the excess of pleasure, that I hardly felt in a condition to meet with you last evening, and I would like to ask if a vote of thanks has been tendered to the members of the Monroe Society for the splendid way in which they entertained the members of the State Society. If not, I move a vote of thanks be extended to the Monroe Medical Society for the magnificent manner in which they have entertained us. [Carried.]

Dr. Dowling then spoke upon the topic of "Physical Diagnosis, Giving an Exemplification of the Aids thereto, including the Stethometer, Dynamometer, Aesthesiometer, etc." He commenced his remarks by

referring to the time, so recent, when physicians were dependent upon the resources which nature alone had given them in diagnosing disease, and said he himself could remember the time when a solitary stethoscope, and that too of a kind which had long since been discarded, was the only instrument, aside, perhaps, from a tongue spatula to be found upon the table of the physician engaged in active practice. In view of this fact he said: We can but express surprise at the array of instrumental aids now in use. It seems as if the expert physician should be able with these mechanical aids and the assistance which chemistry affords, thoroughly to inform himself as to the pathological changes going on in the body. I sometimes think we have become so interested in physiology, pathology, and diagnosis, that we forget the main object of our calling, the relife of suffering, the curing of disease, and the prolonging of life. I have been requested by your President to appear before you to-day armed with the various instruments used in the diagnosis of diseases of the chest and abdomen. I have brought most of them with me. In addition to the improved stethoscopes, the best of which is probably that of Dr. Camman we have pleximeters of various kinds, hammers for percussion, made of various substances and of different weight and shape; instruments for measuring the inspiratory movements of the chest walls, and the movements of one side, or even small portions of one side; instruments for measuring the diameter of the chest or abdomen in different localities; instruments, and quite a number of them, for obtaining the vital capacity of the lungs, or the number of cubic feet of air which can be inhaled by a forced inspiration after evacuating the lungs as far as possible; instruments for obtaining the shape of the chest walls; and instruments by which we can with the eye study the condition of the mucous membrane lining the larynx, and the delicate vibrations of the vocal chords. All these, in addition to the microscope, the clinical thermometer, the ophthalmoscope, sphygmograph, the dynamometer, the aesthesiometer, the exploring canula, by which we can investigate without danger the character of pathological fluids in the most delicate of the shut cavities of the body. And aside from these, numerous instruments have been introduced for pursuing upon the living subject physiological investigations. Prof. Dowling then exhibited many of the instruments mentioned; at the same-time explaining their action and uses. In referring to the pleximeter and hammer he said he thought these simple substitutes for the fingers in percussion were not appreciated as they should be. The ear could be so educated to their use that an accurate decision as to the amount of resonance or dullness could be much mere readily arrived at than when the fingers were used in mediate percussion.

So with the stethoscope. There are no sounds developed within the chest which can be heard with the ear applied to the naked chest walls which cannot be more distinctly heard and located by the aid of the binaural stethoscope of Camman. He referred to the recent improvement of the spiral spring which had taken the place of the rubber band formerly in use, which was apt to become relaxed, and which frequently from vibrations produced by the breath of the examining physician developed sounds which were carried to the ear of the examiner.

In exhibiting a neat and improved spirometer Dr. Dowling dwelt at some length upon the investigations made by various physiologists in determining the capacity of the lungs for air, and explained the difference between the so-called vital capacity of the lungs and the total amount of air which they would contain. He said the vital capacity of the lungs in health and adult life is constant. It does not vary from day to day.

The investigations of Dr. Hutchinson from some five thousand observations show that the average vital capacity or the extreme breathing capacity of all heights is about 215 cubic inches.

Although he was not as enthusiastic as some as to the value of this instrument in physical diagnosis, from investigations made by himself in diseases calculated to diminish the lung capacity, he was satisfied that it was useful as a confirmatory aid to diagnosis.

He had used the instrument in a large number of cases of phthisis, in cases of emphysema, and in cases of pluerisy with extensive effusions, and had found the result to correspond accurately with the conclusions drawn from careful auscultations and percussions. He spoke of a case of pleuritic effusion which filled the entire left chest, pushing the heart over into the right mammary region, which was examined in the presence of the State Society in February last, when upon a subsequent examination in his office he had found the extreme breathing capacity to be but sixty cubic inches. In another case, a strong, robust man, in perfect health, a student of the New York College, showed the enormous vital capacity of 350 cubic inches. He thought this solitary instance could be explained by the fact that he had extraordinary control over the muscles concerned in expiration, and could with a forced effort expel a large portion of the residual air. In the early stages of tubercular phthisis where but negative results can be obtained from the ordinary means of diagnosis, this instrument will undoubtedly give warning which could be obtained in no other way. Prof. Dowling then exhibited the various instruments for measuring the chest. The simple chest measure (composed of two graduated pieces of tape united over a silk saddle which was to be placed over the spine) for determining the relative size of the two sides of the chest. The calipers, the cirtometer, the ordinary stethometer, and the stethometer of Quain, are exceedingly delicate instruments for determining the exact amount of movement in portions of the chest upon inspiration. The dynamometer, an instrument used for noting the daily increase in muscular strength of the hands during convalescence from tedious illness of various kinds.

The aesthesiometer for determining the tactile sensibility of the skin, or the greatest distance between two points at which they convey a single impression when applied simultaneously. Each of these instruments, he said, aids in obtaining a diagnosis in diseases of the heart, lungs, and pleuræ, each is an aid to the other, and the results obtained from each will accurately correspond with that obtained from any one of them. The doctor then commenced the consideration of the sphygmograph and said he had brought with him the most recent invention in this line, the sphygmograph of Pond; he had also brought a large number of tracings taken by himself of the pulses of patients suffering from a large variety of

diseases, where the circulating organs were primarily involved, and where they were involved secondarily. He also had tracings taken from healthy subjects, in childhood, youth, middle and old age, and had come prepared to demonstrate the action of the instruments; to exhibit these tracings, and explain their characteristics, but he had already occupied more than an hour of their valuable time, and as much more would be required to complete his subject, he would ask permission to postpone the consideration of the sphygmograph till the February meeting, when he would be happy to continue his remarks of to-day.

Prof. Burdick: I have been very much interested in listening to the remarks by Prof. Dowling, but it seems to me that one of the best aids in diagnosing phthisis, in determining positively that this disease exists, has been left out by Prof. Dowling, and I would like to have him tell us what his observation and experience have been with the microscope in determining the existence or non-existence of phthisis.

Prof. Dowling: I say it is invaluable and perhaps surpasses all the other instruments together. I had forgotten to mention it. I should advise the younger men in this room,—the older ones need no advice,—to use the microscope in the earlier stages of phthisis. It is more frequently used in the later stages, but if you are in doubt, use the microscope, and if you find the elastic fibrous tissues there, you can make up your mind that your patient will die.

Prof. Burdick: I scarcely use anything above the fifth power. I think there is no instrument known that is so valuable in determining the existence of phthisis at an early period and at a period when we most desire to know whether it exists or does not, as the microscope. In the more advanced stages, there is very little left for us to do, we can send our patients down South or to the Mountains, or out West—to die, but that does not help the patient, nor the widow, nor the widower, nor the children.

I will mention, with your permission, one or two instances in which the microscope in my hands has been of inestimable value in determining a disputed point. I was consulted, some two or three years since, by one of our first physicians in New York, who was called to attend a case in which there had been a great deal of questioning as to his actual physical condition. Several physicians had insisted upon it that there was no trouble with the lung and that it was only bronchial disturbance. This gentleman in avoirdupois, was about 225 or 250 pounds at this time. In good condition, the only trouble was an annoying cough and some expectoration. I requested the physician to give me a specimen of the expectoration and I put it under the microscope, using the fifth power which gave about 230 diameters. From this investigation I found an abundance of fibrous elastic tissue. I said he would die inside of three months. The physician was relieved from dismissing himself from the treatment of the case, for he was soon dismissed by the family and the case went into other hands, but he kept his eye upon the case and the man died in a little over three months, of phthisis. I have had in several instances similar experience in determining, in the early stages of phthisis, its existence.

Under the Report of the Bureau of Pædology, Dr. Rogers, of Crystal Springs said: Some four weeks ago I received a letter from the chairman

of this bureau asking me to serve as chairman, as she could not be present. There are two papers which I will read by title.

"The Inanition of Childhood," by Alfred K. Hills, M. D.

"Care and Preparation of Milk Used for the Atificial Feeding of Infants," by H. L. Waldo, M. D.

Under the Report of the Bureau of Mental and Nervous Diseases, a paper entitled, "Mania, its Causes, Course, and Treatment," was read by Dr. S. H. Talcott, of Middletown.

A paper entitled, "A case of Suicidal-Melancholia," was read by N. E. Paine, M. D., of Middletown.

A paper entitled, "Hystero Epilepsy," by William M. Butler, M. D., was read by Dr. Talcott.

A paper entitled, "The Effects of Climate upon the Insane," by A. P. Williamson, M. D., was read by Dr. Talcott.

A paper entitled, "Metastasis as a Cause of Insanity," by C. Spencer Kinney, M. D., was read by Dr. Talcott.

Under the Report of the Bureau of Surgery, a paper entitled, "Positive Recognition of the Peritoneum in Abdominal Operations," was read by Walter Y. Cowl, M. D.

A paper entitled, "Muscular Anchylosis following Dislocation of the Shoulder Joint," was read by George Allen, M. D.

A paper entitled, "Concerning the Effect of Position upon the Reduction of Strangulated Hernia," by H. I. Ostrom, M. D., was read by title.

Dr. W. C. Doane, said: I notice in the morning paper that a committee was appointed to draft resolutions in regard to deceased members. I have some remarks to make upon the death of an esteemed member, and I desire that the committee may report at the next meeting. [So ordered.]

Dr. Doane: I had expected to bring up a matter in reference to the expulsion of a member by the Central New York Society, but I can see that this is not the time or place to do it, but I simply wish to say to the members of the Society, that, at the meeting of the State Society in February, I shall thoroughly ventilate the subject, and shall then and there ask the Society to administer to the lunatics in Syracuse the proper remedy.

Dr. Wright, of Buffalo: In regard to the Bureau of Climatology, I would say in reference to the report last year, I find myself reporting a paper of which I had no knowledge whatever, until I saw it printed in the Transactions, and as it is so nearly a repetition of what I had put in the year before, I do not wish to have the Society think that I have repeated myself. How my name came there, I don't know.

It was moved, and carried that the Society adjourn.

AFTERNOON SESSION.

Under the Report of the Bureau of Clinical Medicine, the following papers were reported.

"Range of Dose with Clinical Cases," by M. A. Wilson, M. D.

"Gelseminum in Chills and Fever," by Samuel Eden, M. D.

"Variola," by R. C. Moffat, M. D.

"Eczema," by A. Wilson Dods, M. D.

"Pseudo Colic," by J. C. Morgan, M. D.
"Why I use the 30th and Higher Dilutions," by E. C. Price, M. D.
"A very Chronic Case," by J. H. McDougall, M. D.
"A Case of Cholera," by R. Boocock, M. D.
"Clinical Cases," by C. J. Farley, M. D.
"Cerebral Complications," by G. W. Seymour, M. D.
"Obstipation of the Bowels," by J. D. Madden, M. D.
"Pulmonary Abscess," by F. L. Vincent, M. D.

The paper entitled, "Range of Dose with Clinical Cases," was read by Dr. Hasbrouck. Also the paper entitled, "Why I use the 30th and Higher Dilutions."

Prof. Burdick: It seems to me, while the doctor's reasons for giving the 30th attenuation may be good reasons for him because he has met with universal success, still it does not appear to me that these are just and valid reasons why we or any one else should confine ourselves to any individual potency in our prescriptions. I think it a wrong basis to work upon. I started originally from the allopathic school and I commenced with crude drugs given under the homœopathic law. I have since gone on to the highest potency I could obtain and I never saw the time when I was willing to give up the lower potency entirely, and I believe it is an unsafe position for any physician to work upon, to throw aside any round in the ladder. I believe we need them all. I believe there is a time when the lower potencies are necessary to meet the demand, and I know there are times when the cruder drugs cannot and will not touch the case in hand. An illustration was recently brought to my mind. The case was very clearly a case for Arsenicum. Of a very fine preparation of Arsenicum prepared by Jernegan, his 40,000th potency, one dose was all that was needed to make a cure of the case, and that with the utmost promptness. Another case; during the war, a soldier returning with chronic diarrhœa, was suffering from it until he was the most emaciated person I ever saw walk, having about thirty stools a day. He had been treated in a homœopathic dispensary in New York, and I found he had received Arsenicum in different proportions with no effect whatever. I was requested to see this case, and it was clearly a case for Arsenicum and nothing else, and I gave the same preparation I have already mentioned, giving three powders, a powder to be administered daily at night on retiring. After the first powder was taken there was a perceptible improvement, and after the second it was decided, and after the third there was no need of any further treatment, the case was completely cured. A similar case came under my observation about the same time in an Englishman, he had exhausted all the advise he could obtain in England, in the locality where he was living, and was advised to come to America. He had been here for several years, but his malady clung to him and incapacitated him for his duties, and this presented clearly the characteristics for Arsenicum; the same was administered in this case and a perfect cure was obtained in less than a month, three doses a day at first, and diminished to one a day, and then one in two days, then one in three days, and so on until one dose a week. There are exceptions, and the physician who restricts himself to any single potency or preparation is not only doing his patients a great injustice, but he is crippling his own abilities.

The paper entitled, "Pseudo Colic and Other Forms of Local Spasms," by J. C. Morgan, M. D., was read by Dr. Hasbrouck.

Also a paper entitled, "Gelseminum in Intermittent Fever," by Samuel Eden, M. D., read by Dr. Hasbrouck.

Also the paper entitled, "Clinical Cases," etc., by C. J. Farley, M. D.

Also the paper entitled, "A Case of Cholera," by R. Boocock. M. D.

Dr. Doane, of Syracuse: The thought occurred to me that it might be proper to mention the case of a class of difficulties which trouble the most of us a good deal. My mind was directed to the subject while the gentleman was reading the article in reference to hemorrhoids, I refer now to the terrible affliction from which a great many people are suffering, itching of the rectum. Some twenty-four years ago I had a case of this kind which was extremely interesting to me and it lasted twelve or thirteenyears. It was interesting because I chanced to be the subject of it, and had very little peace for eleven years, and I exhausted every means and made use of every appliance that I could lay my hand upon, and the difficulty still continued, and it became intolerable, both day and night. One day in my office, by some accident perchance, I took hold of a vial of Calomel and got some of it on my hands, and they were chapped somewhat, and I noticed that it made my hands very smooth and soft, and the thought occurred to me that this might be a very excellent application in my case. But it was so new to me and seemed to be so entirely trifling, after having tried so much, that I discharged it from my mind, but every few days it occurred to me that I should make use of it. and at last I tried it, and the result of the first application was, I slept all night for the first time I could remember in years, and within a fortnight was entirely cured of this terrible difficulty and have remained entirely well for the last twelve years, and during that time have been able in this simple way, to relieve a great many people of this intense suffering and annoyance by this simple application of Calomel. I throw this hint out here that somebody may possibly profit by it, and that it may prove to some other one who has suffered from this terrible disease, as much a beneficence and blessing as it has been to me.

A member of the Society: What was the strength of the Calomel?

Dr. Doane: *Calomel*—The clear quill.

The Chairman of the Bureau of Materia Medica was absent, and the Recording Secretary read the paper entitled, "Jatropa curcas," written by John J. Mitchell, M. D.

A paper entitled, "Actea racemosa in its Relation to Alcoholism and the Opium Habit," by C. C. Curtis, M. D., was read by Dr. Couch.

Dr. Adams, of Rochester, stated that he could confirm the report by his experience in six different cases.

Dr. Waldo, of West Troy, read a paper entitled, "A Fragmentary Proving of Fucus vesiculosus," by T. C. Fanning, M. D.

Prof. Burdick: I have given this remedy in one instance, given in teaspoonful doses three times a day. For the first week there was a loss of half a pound, which continued for about four weeks, and at the end of four weeks the man weighed more than he did when we commenced the use of the drug, and I discontinued it.

Dr. Talcott moved that the thanks of the Society be tendered to the

representatives of the Press of Rochester for their very full, lucid, and careful report of the proceedings at this Semi-Annual Meeting. [Carried unanimously.]

It was moved and seconded that the Society adjourn.

The president: I congratulate myself and the Society upon the success of this convention, and invite you most earnestly, if a kind Providence shall spare our lives, to meet me next winter in Albany, with all your friends, and with the strongest scientific papers you can present in the interests of humanity and in the interests of homœopathy. [Adjourned.]

II.

Proceedings of the Twenty-Ninth Annual Meeting of the Homœopathic Medical Society of the State of New York, held Tuesday and Wednesday, February 10th and 11th, 1880, at the Geological Hall, Albany. President, Asa S. Couch, M. D., in the Chair.

The proceedings were opened with prayer by the Rev. A. J. Upson, D. D., at the close of which the President said he regretted the interruption which had taken place in the arrangements for the room in which to hold the annual meeting, in consequence of the fire at the City Hall, and suggested that, inasmuch as some of their time had been taken from them by that misfortune, the discussions of the Society be brief and pointed, and that in all business the members would show that due diligence which would enable them to get through in the usual time.

The President then appointed the following committees:

Auditing: Drs. S. P. Burdick, A. R. Wright, O. Groom.

Credentials: Drs. N. Osborne, W. W. Blackman.

Invitations: Drs. H. M. Paine, Albany; W. H. Barnes, Chatham.

President's Address: Drs. S. H. Talcott, Middletown; W. M. L. Fiske, Brooklyn; F. Park Lewis, Buffalo.

The Secretary then read the minutes of the last annual meeting.

Dr. Coburn said the names of Drs. Squires, Biegler and Osborne had been omitted in the list of members, as read in the minutes.

Dr. Wildes: I think Dr. Coburn errs in having the name of Dr. Squires printed, not that I wish to do him any injustice, but the matter was brought up two years ago, and it appeared then that he was not recommended from his society.

Dr. Coburn: Dr. Squires was elected a member of the society last year, and his name does not appear.

Dr. Hills: I do not remember all the circumstances about Dr. Squires, but it seems to me his name came in an irregular way. It appears to me Dr. Doane made a statement that he was not properly nominated.

Dr. Wildes: Dr. Miller was the first to state the facts, and it appeared his name was not properly before the society.

Dr. Doane: I had the honor myself to present the name of my lamented friend Dr. Squires, at the last year's meeting, and I recollect there was something said about his having been omitted the previous year, and at my suggestion and motion at the last year's meeting he was made a member of the State Society. I am very certain of it, as I made the motion myself.

Dr. Hills: His name did not come in the regular way, and we cannot elect him in any other way without a violation of the constitution.

The President: The objection is good and the chair sustains it, and I don't see how it can be remedied at this time. We must elect members according to the constitution.

Dr. Doane: The minutes of the County Society will show that Dr. Squires was delegated by the society to attend the State Society, and that he came here in the regular way.

The President: If the facts are as stated by Dr. Doane, the point taken by the chair is wrong.

Dr. Wildes: I distinctly remember that the question was brought up at the time, and I think Dr. Doane errs in his recollection. I am sure our minutes don't show he was elected.

Dr. Coburn: I will withdraw my motion to amend the minutes by inserting the three names, and take them up singly. I move that the Society decide the matter of the election of Dr. E. B. Squires, of Syracuse, as a member of this Society.

Dr. Hills: I don't see how it can be done without a copy of the minutes of the County Society; I don't see how we can do it constitutionally without this. I have not the slightest objection to the election of Dr. Squires, but on the contrary I will vote for him, but we must do it constitutionally.

Dr. Waldo: I move that the matter be referred to a committee of three to decide.

The motion being seconded, was adopted.

Dr. Coburn: I now move to correct the minutes by inserting that Dr. Biegler, of Rochester, and Dr. N. Osborne, of Buffalo, were elected members of the society. [Adopted.]

The minutes as amended were adopted.

The Secretary then read the minutes of the semi-annual meeting, which were approved.

Report of the Treasurer.

Dr. Coburn: It is with pleasure that I announce the Homœopathic Medical Society of the State of New York to be out of debt; it owes no man a dollar, but on the contrary, many are due it. Much has been done during the year by the society for the advancement of Homœopathy, which appears on the expense account. The annual report has been issued and compares favorably with its predecessors. We have been enabled to pay our expenses, and pay off the old debts. The report of receipts and disbursements is as follows;

TROY, N. Y., Feb. 10, 1880.

Edward S. Coburn, Treasurer, in account with the Homœopathic Medical Society of the State of New York.

DR.

To balance in Treasury	$ 93 90
" Cash from Certificates of Membership	11 00
" " Permanent Membership	344 00
" " County Societies	315 00
" " Sale of Books	324 35
Total	$1,088 25

CR.

By Janitor	$ 10 00
" Stenographer, Albany	22 00
" Stenographer, Rochester	26 48
" Recording Secretary's Salary	250 00
" Weed, Parsons & Co	101 50
" C. Van Benthuysen & Sons, printing vol. 1879	238 50
" Corresponding Secretary's bill, postage, etc	3 79
" Recording Secretary's bill, postage, printing, stationery, etc	89 09
" Bills as per vouchers	246 81
" Appropriation to Dr. Hills	45 00
Total	$1,033 17
Balance in Treasury	$55 08
Assets due from Permanent Members and County Societies	$720 00

Professor Burdick, from the auditing committee, reported that they had examined the Treasurer's accounts and found them correct, and the report was accepted.

Report of Corresponding Secretary.

Your Corresponding Secretary, in accordance with section four of the By-Laws, would respectfully lay before you in his annual report, the correspondence of his office, in behalf of the society. Your worthy President, in a communication, dated May 1st, 1879, directed the Corresponding Secretary to "ascertain the time and place of meeting of the several State societies, to whom we accredit delegates, and then notify the chairman (at least) of our delegation and inform him that *properly prepared credentials for the entire delegation will be forwarded to the officers of the society to which they are appointed.*" "See that such credential *are prepared* and *forwarded.*"

"In corresponding with sister societies, as will be necessary under this request, please tender and write reciprocal courtesies and good will."

I immediately endeavored to carry out the request of the President, and as soon as possible ascertain the time and place of the meetings of the several societies. I found that some of these societies had already held their meetings for the year, but so far as possible I brought the attention of the different delegations to the meetings still to be held, sending them

at the same time duplicates of credentials forwarded, and informing them that a report should be made in any event. I am unable to say what the result of this correspondence may have been, so far as the delegates were concerned, for comparatively few ever replied to the letters. I have yet to learn of a delegate, or perhaps there is one, who has attended the meetings of the society to which he was accredited. If this is the interest that delegates generally take in the performance of this trust, I would suggest, that, if we are to establish and maintain fraternal relations with our sister societies, we will have to accomplish it in some other way. Is there any use in this array of names without a result?

The Homœopathic Medical Society of the State of Pennsylvania provides in its by-laws, section nine, that "the Secretary shall solicit an exchange of publications with other State societies, and report annually their condition and prospects." Would it not be well for us to show our interest in our sister societies in this way, in place of publishing their names *only*, with a list of delegates who never attend their meetings. In corresponding with the officers of the societies to which we have accredited delegates, I have received numerous letters, expressing good will, and some reports, which I will speak of when referring to the different societies. First in the list is our national association, the *American Institute of Homœopathy*, whose session was held at Lake George, in this State, and was undoubtedly attended by a goodly number of the members of this Society. The delegation may report to us before the session is over, and therefore it will not be necessary for me to say anything in regard to the session.

Connecticut Homœopathic Medical Society. The annual meeting of this society was held at Hartford, on the third Tuesday in May, and the semi-annual meeting at Dr. Foot's house, Stamford, Conn., on Tuesday, October 14th, 1879. Dr. S. M. Griffin, one of the delegates, was present and elected an active member, as he had moved into the State. H. M. Bishop, M. D., of Norwich, Conn., is Recording Secretary.

Illinois Homœopathic Medical Association. The twenty-fifth annual session of this association was held at Freeport, Ill., May 20th and 21st, 1879, and from the programme and reports I should judge that they had an interesting and profitable session. The Ogle County Medical Society (Allopathic) appointed delegates to attend the meeting, who were cordially received. T. C. Duncan, M. D., of 133 S. Clark Street, Chicago, is Secretary.

Indiana Institute of Homœopathy. The thirteenth annual session of this society was held at Indianapolis, Indiana, on Wednesday and Thursday, April 30th and May 1st, 1879. From reports furnished your Secretary, I see there were twenty-six physicians present at the meeting, among whom I see the names of Prof. J. C. Sanders, of Cleveland, Ohio, Prof. T. P. Wilson, of Cincinnati, Ohio, Prof. A. C. Coperthwaite, of the University of Iowa, and Dr. W. L. Breyfogle, of Louisville, Ky. The meeting seemed to have been a very interesting one, with a fair supply of papers on professional subjects for consideration. We note, among others, those upon the following subjects: "The Materia Medica, Generally and Specifically Considered," "Characteristics or Key Notes," "Psychologi-

cal Treatment of Disease," "Alveolar Abscess," "Therapeutics of Rheumatism," "Membranous Croup; Its Pathology and Treatment," "Ten Surgical Cases; Success, Mishaps and what they Practically Teach," "Fractures and their Treatment," "Hemorrhage between the Retina and Choroid," "Disease of the Iris," "Yellow Fever," "Scarlet Fever," "Swill Milk," "Climacteric Congestion, "Hysteria," "The Use of the Forceps," and "Retained Placenta," which will readily show the range of subjects considered by the convention.

The following officers were duly elected: President, W. H. Taylor, M. D., of Crawfordsville; First Vice-President, A. C. Jones, M. D., of Connersville; Second Vice-President, C. S. Fahenstock, M. D., of Laporte; Secretary, M. T. Runnels, M. D., of Indianapolis; Treasurer, J. R. Haynes, M. D., of Indianapolis.

The Hahnemann Medical Association of Iowa. The tenth annual session of this association was held at Cedar Rapids, on May 14th and 15th, 1879. There seemed to be about twenty-five physicians present, among whom was Prof. T. S. Hoyne, of Chicago, Ill. From the President's address we learn that homœopathy was never in a more flourishing condition, "as evinced by written statements of physicians in answer to questions upon the status of homœopathy." He also spoke of the flourishing condition of the Homœopathic Department of the State University. The Legislative Committee urged upon the attention of the society the necessity of "substantial and acceptable legislation," with reference to the "regulation of medical practice and to the formation of a Board of Health for the State." Papers on the following subjects were read and considered by the association, viz.: "Santonine," "Differentiation of Nux vomica and Bryonia," "A few Thoughts on the Scientific Relations of our Materia Medica," "Fragmentary Thoughts on Materia Medica," "Ledum palustre in Hemorrhagia," "Report of Cases," "Report on Diphtheria as it Appeared in Cedar Rapids in 1878," "Clinical Observations," "Hæmatemesis During Pregnancy," "On Talipes," "On Fractures," "On the Treatment of Wounds," "On Burns," "Medical Education," "On the Preventable Causes of Disease," and "Granular Ophthalmia."

The following officers were duly elected: President, H. P. Button, M. D., Iowa City; Vice-President, D. R. Hindman, M. D., Marion; Secretary, E. A. Guilbert, M. D., Dubuque; Treasurer, W. T. Virgin, M. D., Burlington.

Kansas and Missouri Valley Homœopathic Medical Association. The annual meeting of this society was held at St. Joseph, Missouri, May 7th and 8th, 1879. The meeting was not large, some eighteen or twenty members present, as many of the Missouri members were compelled to attend the joint meeting of the "Western Academy of Homœopathy, and Missouri Institute," held at St. Louis at the same time. From the partial report of the first day, I should judge the meeting was a success. There seemed to be quite a discussion over the legality of the change of the name of the society, from the "Homœopathic Medical Society of the State of Kansas," to the name heretofore given. The society seemed to

have been incorporated by the Legislature of Kansas, and the question foremost was its compliance with the new medical law.

The following were duly elected officers: President, Dr. V. W. Sunderland; Vice-President, Dr. W. F. Morgan, of Leavenworth, Kansas; Secretary, Dr. J. H. Moseley, of Olathe, Kansas; Treasurer, Dr. Richard Huson, of Lawrence, Kansas. The Treasurer-elect, Dr. Huson, was an old resident and practitioner of homœopathy at Dundee, in this State, and took part in the organization of one of the first homœopathic societies of the State, the Union Homœopathic Medical Academy of the State of New York, which was organized and incorporated under general law, October 28th, 1852, with the doctor as its first president.

Maine Homœopathic Medical Society. The annual session was held at Augusta, Me., on the first Tuesday in June, 1879. I have received no report.

Massachusetts Homœopathic Medical Society. The annual meeting of this society was held at Boston, April 9th, 1879. No report of the meeting was received.

Michigan Homœopathic Medical Society. The annual meeting was held in the city of Detroit, Michigan, on Tuesday, May 21st, 1879. There was no report received.

Minnesota State Homœopathic Institute. The thirteenth annual meeting of this society was held at Minneapolis, Minn., May 20th and 21st, 1879. No extended report was received. The following officers were elected: President, A. E. Higbee, M. D., of Minneapolis; Recording Secretary, G. H. Howes, M. D., of Hastings; Corresponding Secretary, H. C. Leonard, M. D., of Henderson.

Missouri Institute of Homœopathy. The annual meeting was to have been held at Hannibal, Missouri, on the first Wednesday of November, 1879, but we understand it was postponed until spring. No report.

New Hampshire Homœopathic Medical Society. The twenty-sixth annual meeting of the society was held in Concord, N. H., on Wednesday, June 18th, 1879. No report of the meeting has been received.

New Jersey Homœopathic Medical Society. The annual meeting of this society was held in May, 1879, at which the following officers were elected: President, W. S. Kimball, M. D., of Eatontown; First Vice-President, H. H. Hollister, M. D., of Rutherford Park; Second Vice-President, W. J. Andrews, M. D., of Newark; Third Vice-President, Chas. A. Church, M. D., Passaic; Recording Secretary, W. McGeorge, M. D., of Woodbury; Corresponding Secretary, E. J. Howe, M. D., of Newark; and Treasurer, G. W. Bailey, M. D., of Elizabeth. No extended report was received. The next meeting will be held at Newark, May 4th, 1880.

Homœopathic Medical Society of Ohio. The annual meeting was held at Cleveland, Ohio, May 13th and 14th, 1879. No report was received.

Homœopathic Medical Society of the State of Pennsylvania. The fifteenth annual session of this society was held at Cresson Springs, Pa., September 2d and 3d, 1879. The President, Dr. L. H. Willard, of Allegheny City, delivered the annual address, which was by request of the society, a *resume* of improvements in medicine, surgery, etc., during

the preceding year. There seemed to be quite a small attendance, about twenty-one physicians. The following papers were read, showing the professional subjects considered by the society, viz.: "The Materia Medica; the Present Status and Dangers," "Our Materia Medica; How to Read it and How to Utilize it," "Apis and Podophyllum compared in Infantile Diarrhœa," "A Case of Uterine Tumor," "Congestive Dysmenorrhœa," "Rigid Os Uteri as a Cause of Tedious Labor," "Fragaria Versa in Agalaxia," "A Case of Hepatic Abscess, with Operation," "Chronic Nasal Catarrh," "Eczema Auris," "Rare Sympathetic Ophthalmia," "Ossification of the Ocular Choroid," "Air in Health and Disease," "Hypertrophy and Eburnation of the Femur," "Caries of the Tarsal Bones," "Principles of Orthopraxy," "Report of the Committee on Yellow Fever," and the Nicrologist made a report on the death of William Harvey Cook, M. D., of Carlisle, Pa. The following officers were elected: President, J. K. Lee, M. D., of Philadelphia; First Vice-President, H. Detwiller, M. D., of Easton; Second Vice-President, J Wesley Allen, M. D., of Altoona; Recording Secretary, Z. T. Miller, M. D., of Pittsburgh; Corresponding Secretary, R. E. Caruthers, M. D., of Allegheny City; Treasurer, J. F. Cooper, M. D., of Allegheny City; Necrologist, W. R. Childs, M. D., of Pittsburgh; Censors, R. J. McClatchey, M. D., of Philadelphia, J. S. Rankin, M. D., of Pittsburgh, and L. H. McClelland, M. D., of Pittsburgh. The society adjourned to meet at Easton, in September, 1880. The Corresponding Secretary requested in compliance with their By-Laws, "An exchange of publications."

Rhode Island Homœopathic Society. The meetings of this society occur on the Friday evenings nearest the first full moon in January, April, July, and October. That in January being the annual meeting, and the place of meeting is Providence, unless otherwise ordered. No report. Geo. B. Peck, Jr., M. D., of Providence, R. I., is Secretary.

Vermont Homœopathic Medical Society. The twenty-ninth annual meeting of this society was held in the State House, Montpelier, Vermont, on Tuesday and Wednesday, June 10th and 11th, 1879. No report of the meeting was received.

Homœopathic Medical Society of the State of Wisconsin. The fifteenth annual meeting of this society was held at Oshkosh, Wis., on Wednesday and Thursday, June 11th and 12th, 1879. No report was received.

This is in substance what I have received in answer to the letters written as directed. I would most respectfully recommend that we establish and maintain fraternal relations with our sister State societies by an interchange of transactions, and that it be made the duty of the Corresponding Secretary to make from the transactions received, a condensed report to be presented at the annual meeting of our society. It was the universal expression of all the officers of sister societies, that such fraternal relations should be established and maintained between the societies. I judge from what I can learn that other societies do not, as we do, appoint delegates to State societies, except in special cases. This plan would do away with delegations, which amount to nothing, except, perhaps, those to the American Institute of Homœopathy and the State Dental Society, and better accomplish the purpose.

The Corresponding Secretary was also directed by the President to "correspond as largely as practicable with leading physicians of our State and urge their attendance upon our meetings and their contributions to our *material* needs."

This I have done to a large extent, and to many of the letters have received replies expressing the feelings of the writers in regard to our State Society. I am convinced, from the consideration of these communications, and from my contact with members of the profession, that if we will but adopt the words of our late colleague, the immortal Dunham: "*Freedom of thought and liberty of action,*" as the attribute of our Society, to guide its action as an organization, we may look forward to the future with bright prospects of a grand success in the maintenance and advancement of the great fundamental law of nature, for the cure of disease, "*similia similibus curantur,*" and the advancement of scientific knowledge, by the hearty co-operation of a large number of the best educated physicians of our State.

Respectfully submitted,
A. P. HOLLETT,
Corresponding Secretary.

Credentials:

Dr. Osborne, from the Committee on Credentials, presented the following report:

Present. Drs. L. M. Pratt, G. H. Billings, H. M. Paine, E. D. Jones, C. E. Jones, J. Savage Delavan, Geo. A. Cox, J. W. Cox, C. E. Goewey, M. A. Garrison Pomeroy, G. W. Gregory, H. L. Waldo, H. Swits, S. H. Carroll, J. F. McKown, Geo. E. Gorham, Titus L. Brown, W. H. Fowler, C. Ormes, C. E. Swift, A. B. Rice, O. Groom, R. E. Miller, Robert Boocock, W. H. Barnes, P. W. Mull, J. S. Phillips, C. P. Cook, Anna C. Howland, Asa S. Couch, A. R. Wright, W. B. Kenyon, F. Park Lewis, N. Osborne, W. B. Gifford, S. S. Guy, M. F. Hein, W. M. L. Fiske, Henry Minton, Samuel Talmage, W. E. Warmsley, Alice B. Campbell, E. Hasbrouck, W. W. Blackman, Helene S. Lassen, D. A. Gorton, J. L. Watson, H. M. Dayfoot, B. P. Andrews, E. C. Baker, Geo. B. Palmer, Allen D. Carr, J. A. Biegler, R. A. Adams, Alice A. Stoddard, J. H. Demarest, Thomas Wildes, Alfred K. Hills, T. Franklin Smith, H. Amelia Wright, Sarah J. White, E. Carleton, Jr., Alice H. Burdick, S. P. Burdick, J. W. Dowling, H. S. Hutchins, C. E. Chase, W. H. Watson, W. C. Doane, J. W. Ostrom, John J. Mitchell, S. H. Talcott, N. E. Paine, O. E. Pratt, C. A. Beldin, R. E. Belding, E. S. Coburn, Wm. Simpson, M. L. Dowdell, C. G. Clark, S. J. Pearsall, A. P. Hollett, J. J. Alleman, D. J. Turner, L. A. Clark, R. Slocum, C. A. Mosher, E. H. Eisenbrey.

Dr. Coburn moved that the report of the committee on credentials be accepted, and the committee continued. [Adopted.]

The President: Before proceeding to the next order of business, I have the pleasure of introducing to you the Surgeon-General of the State of New York, Dr. Wm. H. Watson, of Utica, who will make a communication.

The Surgeon General: Mr. President, ladies and gentlemen: I am requested by Governor and Mrs. Cornell to present their compliments to the members of this society, and request the pleasure of their company and that of the ladies accompanying them, at the reception to be given this evening at the Executive Mansion, between 9 and 12 o'clock.

Dr. Hills: I move that the Society accept the invitation with thanks. [Adopted.]

Dr. Jones: I think at this time we ought to give some expression of the sense of the Society to our Treasurer, for presenting the report he has. We have never, I think, since the organization of the Society, had any money in the treasury, and now that we have a balance in our favor, I think we should give expression to our astonishment and wonder in a complimentary vote to the treasurer.

Dr. Minton: I move that the thanks of the society be tendered to the Treasurer for the admirable manner in which he has discharged his duties for the past two years.

The motion having been seconded, was unanimously adopted.

NOMINATIONS.

The President announced that the next order of business was nominations of officers (chairmen of bureaus at the close of each bureau report), delegates to other societies, honorary and permanent members (the latter upon recommendation of the respective county societies).

The following nominations for President were then made: Drs. S. H. Talcott, Asa S. Couch, A. R. Wright, C. E. Blumenthal, E. Hasbrouck, J. W. Dowling.

The President said: I desire to thank Dr. Wright for the nomination of myself, but my constitution is somewhat broken, my years are advanced, and I don't feel like bearing the honors and emoluments of this station for another year; I know I was elected by the impulse of the society rather than on its deliberate judgment in selecting the best man, but as I was elected to the position, I accepted it as many do who have greatness thrust upon them. I therefore respectfully request that you will confine your attention to the other candidates, and not vote for me, and thus "waste your sweetness on the desert air."

The following nominations were then made for First Vice-President: Drs. N. R. Seeley, A. P. Hollett, S. H. Talcott and C. Ormes.

For Second Vice-President: Henry Minton.

For Third Vice-President: Drs. W. B. Gifford, A. B. Carr, R. A. Adams.

For Treasurer: E. S. Coburn.

For Recording Secretary: H. L. Waldo.

For Corresponding Secretary: C. E. Jones, A. P. Hollett.

CENSORS.

Northern District—A. W. Holden, G. W. Little, L. A. Clark.
Southern District—W. M. L. Fiske, J. H. Demarest, S. H. Talcott.
Middle District—C. E. Swift, M. O. Terry, G. B. Palmer.
Western District—W. B. Kenyon, A. B. Carr.

HONORARY MEMBERS.

Drs. J. P. Dake, Nashville, Tenn., W. L. Breyfogle, of Louisville, Ky., Samuel Potter, Milwaukee, F. D. Durkee, San Francisco, John C. Budlong, Surgeon-General of the State of Rhode Island, J. H. Gallinger, Surgeon-General of the State of New Hampshire.

PERMANENT MEMBERS.

The Secretary read the following nominees for permanent membership received from the County societies, *to be elected at the Annual Meeting, Feb.*, 1881.

FIRST DISTRICT.

Wm. Hanford White, M. D., Joseph Finch, M. D.

SECOND DISTRICT.

William M. Butler, M. D.

THIRD DISTRICT.

J. J. Peckham, M. D., Jacob S. Phillips, M. D.

SIXTH DISTRICT.

Isaac Miller, M. D.

SEVENTH DISTRICT.

E. W. Bryan, M. D., B. F. Williamson, M. D., H. M. Dayfoot, M. D.

EIGHT DISTRICT.

F. Park Lewis, M. D., A. B. Rice, M. D., A. J. Evans, M. D.

ELECTION OF PERMANENT MEMBERS.

On motion the Secretary was instructed to cast the ballot of the society for the election of the following permanent members, and they were declared duly elected:

1st Dist.—Warren Freeman, M. D., Wm. Scherzer, M. D.
2d. " —S. E. Stiles, M. D., John J. Mitchell, M. D.
3d. " —Wm. H. Van Derzee, M. D., Catherine E. Goewey, M. D.
5th " —N. H. Haviland, M. D.

Dr. Talcott moved that the Secretary cast the ballot of the society for the election of honorary members, which having been done, the following were declared elected: Edward A. Guilbert, M. D., Henry N. Guernsey, M. D.

Report of a Committee.

The next business was to receive the report of a committee consisting of Drs. Jones and Holden.

Dr. Jones said: I was not aware until I saw my name on the order of business that I was chairman of the committee. I supposed it was Dr. Holden, but as Dr. Holden could not be here I will try and make a report. The committee appointed to examine into the case of Dr. Bennett and his alleged irregularities in not paying some moneys over that belonged to the society, find he is entirely exonerated from any such charges, and that the charges brought against him were frivolous and there was no truth in them at all. Therefore we recommend that he be placed in the same position he occupied before the charges were preferred. His name was proposed for honorary membership at the last meeting, and these charges were brought up to prevent his nomination. While I would exculpate the doctor from any charges against him by the society of which he was a member, I am, for one, opposed to making

honorary members so indiscriminately. I don't think that because a permanent member of this Society leaves the State and goes to some other State he should be nominated to honorary membership, for if there is any honor in it which is to be valued, the person receiving it should have some other recommendation than simply being an M. D., or a permanent member of this society. He should have made some advancement in medical science and have benefited the profession in some way. Therefore, with these views, I would not recommend Dr. Bennett for honorary membership.

Dr. Coburn moved that the report be accepted and the committee discharged. [Adopted.]

The President announced that the next order of business was action upon the proposed changes in Article VI of the Constitution, notice of which was given at the annual meeting in February, 1879; John J. Mitchell, M. D., proposing to change the time of the annual meeting to the *third Tuesday in September*, and H. M. Paine, M. D., proposing to change the time to the *first Tuesday in February*.

Dr. Fiske moved that the time be fixed as the third Tuesday in September, as at that time physicians had their lightest work, and were not liable to be storm bound. He had been talking with a number of physicians in regard to the change and it struck so many favorably that he would move its adoption.

Dr. Hasbrouck: I second the motion.

Dr. Talcott: I think there are some objections to the proposition of Dr. Fiske. It seems to me the most appropriate time for holding the annual meeting is the time we now hold it, and the place in Albany, for the reason it is the time of the year we can meet the Legislature of the State and and can perhaps influence legislation in favor of homœopathy. There will be health bills brought up from year to year, and other matters of interest to the society which should be attended to. You can't get along without attending to political influences in a society of this kind. Therefore I think this time is better than the summer. If we had a business meeting in the fall of the year it would interfere with the pleasure of the semi-annual meeting.

Dr. Coburn: I give notice of an amendment to the constitution for a change of the time of meeting until the first Tuesday in March.

Dr. Jones: I am opposed to that amendment. The State Society of the old school changed their time of meeting to an earlier date, I think it was in June, so as to have it in a pleasant time of the year. They held their meeting at that time for one or two years, but they found it would not work and they changed back again to the first Tuesday in February as being better, and accommodating them better for legislative matters; if there is anything to be brought before the Legislature they have opportunity at that time to go before the committees they wish to influence. Now there is a bill before the Legislature for the establishment of a Board of Health. That committee meets to-morrow, and they have had two or three meetings already. At the meeting last Wednesday the Allopathic Society had a hearing before them. We prevailed upon the committee to adjourn the case until to-morrow at 3 o'clock, so that a committee from this Society

could go before them and present our views in regard to the Board of Health. If our society meets in the spring or September, or at any other time except when the Legislature is in session, we shall lose a great deal. We shall lose an opportunity to go before committees that we may be interested in. We cannot get a committee to leave their homes for the purpose of going before a committee of the Legislature. We have also the executive here, and if weare here, we can get things, otherwise we might not.

Dr. Talmage: If it is proper I would amend Dr. Fiske's motion by suggesting the first Tuesday in February.

Dr. Jones: That will be the same time the Allopathic Society meets, and it would be very inconvenient to get rooms.

Dr. Talmage: Then make it the same as it is now, the second Tuesday.

The President: The chair is a little in doubt as to whether it is proper to accept amendments or not. My private impression is that the society has the matter in its hands and an amendment would be in order. I would like to have the opinion of the society on it, in order not to establish an unfortunate precedent.

Dr. Doane: I was going to remark that, in my judgment, if we change the time of the meeting of our society, we shall all regret it. We had a little experience of this kind in Pennsylvania during my residence there, and when important matters came up in the Legislature of the State, connected directly or indirectly with the homœopathic profession, committees were appointed by the society, on matters of legislation, who never attended; and year after year things ran along which were neglected. It was found impossible to attend to these matters. At last the society was compelled to hold its yearly meetings at the city of Harrisburg. I think every member of the society will regret the change, and it will damage the society so far as legislative matters are concerned.

Dr. Guy: I believe the president's impression was correct in regard to amending. So long as notice has been given, you can amend it any way you please.

Dr. Wildes: I shall oppose the change. Two years ago the whole matter came up on the change of time. The whole question was discussed *pro* and *con*, and by a large society vote it was decided not to change it. It was decided it was not in the interest of the society to change it. It was decided that if a sufficient number of members found it convenient to attend, it was not necessary to change it, and, if we did change it, others would not come. As to changing it to the fall, a great many physicians are away during the summer, and will have scarcely settled back into harness when they are called away again to attend a meeting of the society, which is the business meeting, and a matter of importance, not of pleasure. Then again it will not come at the time the Legislature is in session, and, as Dr. Jones and others have said, it is important that we should be in Albany and present such matters as we may think advisable to the Legislature. As to changing it to the first Tuesday in February, the Old School Medical Society holds its annual meeting then, and the Grand Chapter of Masons hold their meeting in Albany, and Albany is too full of scientific and intelligent men, and there is very little room for us homœopaths. [Laughter.] We want our colors to shine out.

Dr. Mitchell: I presented the proposed amendment at the request of many valuable members who reside West, and have given me sad accounts of being snow-bound. Then again, others who live in New York, with the colleges in session, find it almost impossible to present themselves here. I fully agree with the remarks of the gentleman who spoke of the Legislature being in session. Of course this business meeting of ours is at a time when we should watch legislation, but if we met in the autumn our work could be laid out and committees appointed, and it could be attended to as well as by us. So far as my personal convenience is concerned, this is not the best time, and I think the other practitioners would agree with me, yet I propose to come in spite of that; but if we could have it in the fall we would have more present than we have now, as we would not have to contend with the press of business and difficulty of getting here. Those were the two things that suggested the amendment to me.

Dr. Groom: I merely wish to say I concur with the remarks of Dr. Doane in this matter. It seems to me he has given you the correct solution of the matter. To have two sessions so close together will be entirely out of place, and there are more influences to induce members to come to this society meeting at this season of the year than at any other season I can think of. Certainly, I think it will be a detriment to the society to change it, and therefore I am in favor of keeping it as it is.

Dr. Wright: I simply wish to speak of the matter of legislation urged in favor of the time of meeting. I believe I am one of the oldest members of the society, and I cannot remember more than one occasion when we had a committee to meet a committee of the Legislature in session. We have depended on the Committee on Legislation, selected for its competency, and, as I remember, that committee has had very lively correspondence with members all over the State in regard to matters affecting our interests. They have conducted the business with a great deal of intelligence; it has proved very satisfactory, and the society has done very little at its annual meetings in regard to legislation. Therefore that argument falls to the ground, and we can just as well have a meeting in the fall when we can enjoy it, and can do all our business in three days.

Dr. Talmage: If it is proper I would move that in the sense of the society it is not desirable to change the time of the annual meeting.

Dr. Swift: It strikes me gentlemen don't understand what this meeting is. As I understand, it is the legal meeting. We meet here for business in a legal way. We are a legal society, an organized society by delegations from each county, and we have an object in view. What is that? That our standing in the State may be known; that we may have our rights as citizens of the State; and it strikes me to change the time of meeting from the winter to the summer would be erroneous. We are now in session, and the Legislature is in session. Here is an important bill coming up, and the chairman of the committee to which it is referred is Senator Williams. We want to get access to the Governor and to the Chairman of that committee. How will we do it? While we are in session it is the easiest thing in the world to appoint a committee, who could go there in a few hours and see them. If the meeting was changed to the summer we could not get the information in six weeks that we can now get in half an hour. Another thing is, you meet for business, and have members from

different parts of the State, who have influence with members of the Legislature, and a word from one of those gentlemen to the member he is acquainted with will have more influence than a committee would have in six months. I know Senator Woodin and Governor Cornell, and they are both good homœopaths, and you can get at them now and rely on them as friends.

Dr. Hasbrouck: I was going to ask a single question that may help the Society in deciding this matter. Does the law require that the annual meeting of the Society shall be held in Albany?

Dr. Paine: The law requires, that the first meeting shall be held in Albany, and after that the Society can fix the time and place itself.

The motion of Dr. Fiske was then put, and lost, only four members voting for it.

The President then put the question on the amendment proposed by Dr. Paine, on which Dr. Paine requested to be allowed to withdraw the amendment, and was permitted to do so.

SEMI-ANNUAL MEETING.

The Secretary read the following communication from the Kings County Homœopathic Medical Society:

BROOKLYN, Feb. 7, 1880.

To the Homœopathic Medical Society of the State of New York:

At the last regular meeting of the Homœopathic Medical Society of the County of Kings the following resolution was adopted:

Resolved, That the Homœopathic Medical Society of the State of New York be invited to hold its semi-annual meeting in Kings County during September next.

The place and date of meeting to be decided by a committee of this society.

By order of the society.

W. W. BLACKMAN, Rec. Sec'y.

Dr. Hasbrouck: I move the acceptance of the invitation, and in doing so I wish to explain the ambiguous way in which it is written. The Society is invited to meet in Kings County. At the last meeting of the State Society quite a number of physicians expressed a wish to come to Coney Island. We may not, possibly, have the meeting at Coney Island, but we can have the meeting in Brooklyn and take you to Coney Island. We will let the Secretary know in ample time to inform the Society of the arrangements made for holding the meeting.

The invitation was then unanimously accepted.

PROPOSED AMENDMENTS TO THE BY-LAWS.

The President announced that the next order of business was action upon proposed changes in the by-laws recommended by the executive board.

Dr. Waldo, Secretary, read the report, as follows:

1st. That Section VIII of the by-laws be entitled "Bureaus and Committees."

2d. That the bureaus of Medical Education and Societies and Institutions be discontinued.

3d. That a Committee on Medical Education and a Committee on Societies and Institutions be annually appointed, in the same manner as bureaus are appointed.

4th. That the clause relating to the appointment of bureaus be amended so as to read as follows: "Each of these bureaus shall consist of as many members as the President of the Society shall see fit to appoint—not less than three—who, with the exception of the chairman, shall be appointed annually by the President, with the advice of the other members of the executive board.

5th. That Section XV of the by-laws be amended so that a vote of two-thirds of the members present shall be necessary to amend them.

On motion, the proposed changes were taken up *seriatim*. The first three recommendations were then put and adopted. Dr. Jones moved the adoption of the amendment relative to the appointment of bureaus.

The President: I should recommend the Society to go a little carefully on that amendment, for the reason it makes it necessary for the President, in filling the bureaus, to correspond or have some arrangement with every member of the executive board. No man should be appointed to the position of President unless he is able to fill the appointments of the bureaus.

Dr. Wildes: There will come a time when a President will be elected who is in every respect a capable man, but, in consequence of non-familiarity with the different gentlemen, will find himself in a fog unless he communicates with the other members of the executive board.

The President: If the President elected were as able as Dr. Wildes suggests, he would not proceed to fill the bureaus without consultation with some one.

Dr. Paine: Why cannot that be changed so that the head of a bureau can select his own associates? It seems to me that will be very proper, and I do not see that any harm will come from it. We appoint the chairman of the bureaus, and let those gentlemen select their own associates.

Dr. Waldo: A year ago, when elected Secretary, I wrote to the chairmen of bureaus, and the names of several different physicians were suggested by different chairmen. I recollect that the same physician was selected for several different bureaus, and it seems to me it will be better to have one person make the appointments.

The Surgeon-General, Dr. Watson: It seems to me the President will be the best man, because he will, from his position, look over the whole State, and make the best appointments for each bureau without any conflict of that kind.

The proposed amendment was then put and lost, and the remainder of the report was adopted.

BUREAU OF MEDICAL SOCIETIES AND INSTITUTIONS.

The next order of business was to receive the report of the Bureau of Medical Societies and Institutions.

Dr. Hills, Chairman of the Bureau, said, in order to give the society the best idea of the condition of the institutions, he would call on gentlemen to speak of them. With regard to the Albany Homœopathic Hospital

and City Dispensary, he would call on Dr. H. M. Paine to state its condition.

Dr. H. M. Paine said: I really am not prepared to present any report of our hospital. Dr. Cox has served as Chairman of the Executive Committee during the past year, and is better prepared to give statistics than I. I can say the hospital is in a very flourishing condition. It is out of debt, and during the past year it has had a larger number of patients than in former years, and a larger amount of money has been contributed for its support than in any previous year. It is in a very favorable condition. About 3,000 cases are treated annually at the dispensary.

Dr. Osborne was then called upon, and said: I would say the institutions of Buffalo are booming. We have quite a number of institutions. The hospital is not out of debt, but is competent to hold about thirty-five or forty patients, and we manage to keep it full most of the time. We have also a general dispensary, that is very well attended by quite a number of patients, who visit it daily. We also have an eye and ear dispensary, under the charge of Dr. F. Park Lewis, which is doing a good business. We have also a hospital for fallen women, which is in a prosperous condition.

Professor Burdick was then called upon, and said: It affords me a great deal of pleasure to state that the Hahnemann Hospital of the City of New York is in a flourishing condition. Its new and elegant building comprising the main building of the hospital, is complete, and its wards and beds are filled with patients. This institution is doing a good work both for the sick and for the profession. It gives me pleasure also to mention in connection with the Homœopathic College, that this institution is also in a flourishing condition. We have an excellent class, and our standard we have endeavored to place high, requiring three full courses, and a graduating course, and our examinations at the close of the terms are most rigid. This has probably done us some harm, and has probably frightened some of the timid away from us, but we hope it will give the community physicians who are worthy of the title.

Dr. Talcott was then called on, and said: The institution of which I have charge, the State Homœopathic Asylum for the Insane, is an institution which some of the members have visited. Some of you will probably remember our holding the semi-annual meeting there a year ago last fall. Since that time the work of building up the institution, filling it up with patients, improving the grounds and improving the internal appearance of the building has been pushed steadily forward. Last winter we came to Albany and secured an appropriation of $75,000 for the erection of a new pavilion. We expect to ask for $75,000 this winter, and with that expect to do the rest of the work in that direction. The institution has been on a paying basis for three years; that is, the receipts from patients cover running expenses; our debts are paid, and we had a balance at the last quarterly report of $24,000. Our percentage of recoveries has been from 40 to 46 per cent., our death rate from 6.94 to 7 per cent. The last report which I forwarded to Dr. Ordorneaux, the State Commissioner in Lunacy, showed that from November, 1878 to November, 1879, our death rate was 4.94 per hundred. I don't know that there is anything more to explain. The farm and grounds have been improved, and a greenhouse

put up, making the general appearance much more attractive than it was when the society was there in the fall of 1878.

Dr. Willis was then called, on and said: I did not expect I should be called upon to represent the Brooklyn Hospital, but I will say we are in a very flourishing condition. We shall soon have our sixth anniversary. We can accommodate about sixty patients, and are generally full. We have also recently been enabled to pay off our debt of $17,000 and are now free from debt. We have connected with the institution a dispensary, which treats about 12,000 different patients a year.

Dr. Fiske was then called upon, and said: We have in the eastern district of Brooklyn a Homœopathic Dispensary, the handsomest building in Brooklyn, and treat from eleven to thirteen thousand annually there. There is also a dispensary in Gates Avenue which treats a good many. I want to say one word for the Middletown Asylum. I have had three patients under Dr. Talcotts care, and every one of them spoke in the highest terms of the care, kindness, treatment, food, and skill brought to bear upon them. I want the State Society to appreciate that.

Dr. Talmage on being called upon said: Last year I was appointed to represent the Gates Avenue institution in this society. I have acted as house physician for the Gates Avenue Homœopathic Institution for ten years; it has been in operation for the last thirteen years, but now, wishing to devote my whole time to my private practice, during the last month I resigned from my position and other parties have been appointed. That institution has been going on quietly doing good work, and is out of debt, and has $2,000 in its treasury at the present time. I would also state that I am consulting physician of the Brooklyn Nursery, which is a homœopathic institution. It is attended by homœopathic physicians and accommodates about forty babes under three years old. It is managed by ladies, and they say it is in a very flourishing condition. They are not in debt, but have a property that was leased to them last year, and are making arrangements for erecting a large addition to the building. They have a small sum on hand, and a strong effort is being made to raise more money.

Dr. A. B. Carr, of Rochester, was then called on and said: There is only one institution at Rochester, which is the Homœopathic Free Hospital. I have not been at any of the meetings since two years ago, but it is still progressing, doing its work, and has entirely superseded the allopathic dispensary there.

Dr. Hills said: The committee would remark in relation to the Ward's Island Hospital that it has continued its work about the same as previously reported. The number of patients is about the same, and continues as in the first years of its existence. The death rate has increased in consequence of the large number of cases of phthisis sent to us. A great number of deaths come from that dread disease, phthisis. Some recover sufficiently to go out and attend to their business, but in many cases they return to us to die. The present chief of staff is Dr. Webb, who succeeded Dr. Holden. He promised to send a complete report of the hospital this year, but I have failed to receive it. The New York Ophthalmic Hospital is still increasing in the attendance of patients, as perhaps many of you have seen from the reports in the journals. The dispensaries, I think all of them, in existence one year ago, still continue to exist, and the Western

Homœopathic Dispensary have recently purchased a site on the corner of Seventh Avenue and Thirty-Eighth St. for $11,000, and are so changing it that they will have facilities for the treatment of various diseases. I think they also intend to have a hospital for children in the upper story some time during the present year. The other dispensaries, so far as I know, although I have no written report, are in a satisfactory condition.

A Member: I would like to mention another institution which has failed to be heard from, the Brooklyn Maternity, which has been in existence twelve or fifteen years. They are doing a trustworthy work, and although pecuniarly embarrassed, they hope to come out from under the cloud.

Dr. Wildes moved that the report be accepted, and that Dr. Alfred K. Hills be now elected as chairman of the Bureau of Medical Societies and Institutions for the ensuing year. [Adopted.]

Report of the Necrologist.

Dr. Waldo, secretary, read the report of the necrologist, as follows:

The undersigned regrets to report to the State Society that intelligence of the death of the following Homœopathic Physicians of this State has been received since last report:

S. D. Hand, M. D., Binghamton; J. M. Cadmus, M. D., Waverly; H. Beakley, M. D., Peakskill; L. B. Waldo, M. D., West Troy; E. B. Squires M. D., Syracuse; D. D. Smith, M. D., Brooklyn; E. A. Munger, M. D., Waterville; H. V. Miller, M. D., Syracuse.

Brief memorial notices of these, our late lamented colleagues, will appear in the official transactions.

HENRY D. PAINE.

Dr. Jones moved that the report be accepted. [Adopted.]

Dr. Coburn moved that Dr. H. D. Paine be continued as necrologist of the society. [Adopted.]

MISCELLANEOUS BUSINESS.

The President read the following telegram from the Connecticut Homœopathic Medical Society.

H. L. WALDO, M. D., Recording Secretary:

Regret my inability to be with you. Present the compliments of the Connecticut Homœopathic Medical Society to the New York State Homœopathic Medical Society.

WILLIAM D. ANDERSON,
Pres't Con. Hom. Med. Society.

Dr. Alfred K. Hills moved that the Secretary send a suitable answer to the telegram. [Adopted.]

Dr. Guy; I have an unfortunate matter to bring before the Society, which I regret exceedingly. The Kings County Homœopathic Medical Society have seen fit, for various reasons, to expel me from that Society during the past year. I have an application to this society for a hearing under the law of the State, and I ask the President to receive my appeal from the County Society for investigation. I have a written appeal, which I present to the Society without comment, and ask, if a committee is appointed, it be handed to that committee to examine.

Dr. Jones: With all due deference to Dr. Guy—and I know nothing about the merits of this case—I am opposed to bringing personal grievances between societies to the notice of the State Society. That is not the object of our society. The State Society is for the purpose of legislating, and not settling grievances between individuals and societies. I do this not with reference to Dr. Guy, but two years ago Dr. Carmichael brought up a grievance in relation to the college, and we had to renew it again last year by an answer from Professor Dowling. It is not pleasant, and we should leave the local societies to settle their own grievances.

Dr. Guy: I simply wish to say that the law gives me the right I claim.

Dr. Wildes: I know nothing whatever of the merits of the controversy, and nothing whatever of the circumstances connected with it; I do know a precedent was established here by which we gave a hearing to a gentleman on the floor, and we ought to give it to the gentleman who makes the application. If the law stands as it is read, we owe it to him.

Dr. Talcott: I move that the matter of Dr. Guy be referred to a committee of three, to report to the society at some future time. [Adopted.]

The President appointed as such committee Drs. S. H. Talcott, R. A. Adams, and C. Ormes.

Adjourned until 2 P. M.

AFTERNOON SESSION.

The Society resumed at 2:30 P. M., the first Vice President, Dr. Alfred K. Hills, in the chair.

Report of Bureau of Materia Medica.

Dr. John J. Mitchell in presenting the report of the Bureau of Materia Medica, said, it is a good omen in so far as the business of the Society is concerned, if all the bureaus are in the position of the Bureau on Materia Medica, for we shall get through very quickly and have very little to do. I have had a number of papers promised and I believe there are five or six in existence, but I have been unable to obtain them. Those I have I will read by title as follows:

"Have We a Therapeutic Law?" by John J. Mitchell, M. D.

"High Potencies: Do they Affect the Living Organism," by P. P. Wells, M. D.

"Phytolacca Decandra," by L. M. Kenyon M. D.

"An Introduction to the Study of the Potashes," by T. F. Allen, M. D.

"Petroleum Poisoning," by M. M. Gardner, M. D.

The paper entitled, "Have We a Therapeutic Law?" was read by Dr. Mitchell.

On motion the report was accepted, and Dr. J. J. Mitchell was elected chairman of the bureau for the ensuing year.

The next business was to receive the *Report of the committee to which was referred the preambles and resolution offered by E. P. Fowler, M. D., at the annual meeting in February*, 1878.

Dr. J. J. Mitchell said: The committee are sorry they cannot present a unanimous report. One member of the committee has declined to act with us in the report for reasons which we will hear at the proper time. I think perhaps before giving the report I should say, that whatever may be the result of our action this afternoon, we come together with far different

hearts from what we did a year ago. I must say I came to the meeting a year ago trembling. It seemed as if a rupture was impossible to be avoided, for one brother was fighting against another, and it seemed as if trouble was brewing. This has been a year in which a cementing process has been going on, and we seem to have more knowledge of each other than we did a year ago, and whatever may be the outcome, I think the correspondence of the committee with and seeing members, and getting their ideas has been a profitable one for the Society and the committee. Of course while the committee does not at all yield in principle, their object has been to present some views on which the society can unite, or on which there may be a basis of action. Of course in a delegated body like this, delegated by bodies very far from here, it is almost impossible to have unanimity except on great principles, but they have attempted to act as peacemakers. They have seen brethren trammelled by doctrine rigidly enforced which they did not believe in, and they have tried to relieve themselves by adopting principles which have been misconstrued. Freedom we believe in, and a rigid adherence to fundamental law, and that is the foundation of the report we make this afternoon. The report is as follows:

"The Committee to whom was referred the report upon the State of Homœopathy received by the Society at its last annual meeting would respectfully report,

That in accordance with the resolutions contained in the report, the members of the committee have during the year conducted an extensive correspondence with the profession throughout the State.

They have endeavored to obtain from those who felt aggrieved, a statement of their causes of complaint; and they have attempted to unite in a report to the Society which shall be true to the principles of Homœopathy, and yet broad enough to cover the real issue which seemed to demand the resolution of 1878.

Your committee has found a general and most hearty concurrence of belief in the law "similia similibus curantur." It has found a diversity of sentiment concerning the use of attenuated medicines, and as to the reliability of provings made with them.

There is also a lack of harmony prevailing throughout the profession as to the expediency of putting upon record any expression concerning the use of extraneous appliances, when treating a patient with internal medication, administered according to our therapeutic law.

It is very generally conceded, however, that the mere fact of being a homœopathic practitioner, has debarred no one from the right to use such appliances, if in his judgment they were demanded.

Your committee wish to draw careful attention to the protest of those engaged in the passage of the resolution of 1878.

They contend that their position has been misrepresented, and the intent of their resolution most unjustly judged.

It seems to your committee that in their attempt to place themselves in a proper position before the community, they were betrayed into expressions that appeared to be false to the principles they had so long professed, and for which they had so long contended.

Your committee remembers that words do not always convey the thought intended. And they cannot do otherwise, than exercise the utmost char-

ity toward the movers of the resolution of 1878, and to express their confidence in their protestations. We deem it expedient however, to calmly and decidedly put ourselves upon record as misrepresented by it, and we wish to do this in plain and unmistakable language.

Your committee, therefore, suggests that the resolutions which they herewith present, be adopted as a substitute for the preamble and resolution passed by this Society in 1878, as expressing the views of this body in regard to the matter under consideration.

Resolved, 1st. That we adhere to the formula "*similia similibus curantur*," as enunciating the great therapeutic law for the treatment of disease. Evolved by induction, formulated by the venerated Hahnemann, tested and approved by thousands of physicians during scores of years, we are assured that, with our increased knowledge of the materia medica, we shall be able to demonstrate more fully its universality as a therapeutic law, and show in a more perfect manner its harmony with other natural laws.

Resolved, 2d. That we clearly and emphatically distinguish between a "therapeutic law" and the laws of chemistry, physics, and hygiene; and while in the treatment of disease, their formula, "*casua sublata tolletur effectus*," is often to be remembered and used with advantage, yet such laws and such action in no way infringe upon or invalidate the *therapeutic law*, "*similia similibus curantur*."

Resolved, 3d. That in subscribing to the law of "*similia similibus curantur*," we have not in the past, nor do we now, yield one tittle of our rights as physicians, to use any means or appliance of the general profession in the treatment of our patients, or in the palliation of their suffering, through the application of any physical, surgical, chemical or hygienic law, leaving the question of such use to the individual judgment of the practitioner.

Resolved, 4th. That the great work of our school in the advancement of medical science is the proving of drugs, the enlargement, purifying and verifying of our materia medica, and its practical application in the treatment of disease.

That we point with just pride to the work we have already accomplished. And we recognize in the continual appropriation of the results of our labors by other schools of medicine a virtual endorsement of our work and a tacit acknowledgment of its value.

Resolved, 5th. As we have been unable, as yet, to deduce a law to guide us in determining the *amount* of a drug to be used, or the *attenuation* to be exhibited, in order to meet the demands of any case most accurately, this Society, while on the one hand it refuses to join with those who decry attenuated medicines, on the other, will not refuse to recognize those, who, governed by their honest convictions, can only exhibit crude medicines or the lowest attenuation in the treatment of the sick.

Resolved, 6th. That, contrary to the opinion held by some, we most thoroughly endorse and would most earnestly enforce, the study of pathology and pathological anatomy in our schools and by our students, as determinating in the direction of a broader medical culture.

Resolved, 7th. In conclusion, we would most frankly and fully join in the motto:

"*In certis unitas, in dubiis libertas, in omnibus charitas.*"

J. J. MITCHELL,
ASA S. COUCH,
W. C. DOANE,
A. W. HOLDEN } Majority of Committee."

Dr. Carleton: I wish to define my position in a few words and in just a little plain English. Previous to the Fowler resolutions, in 1878, we were in harmony. Why was that firebrand thrown in? It was to set us by the ears and make us trouble. An effort was made to bring the matter up last year, and my idea was to make white paper of it, but it did not prevail. A committee was appointed, and you have heard the report. There is a great deal of plain truth in it. It is all understood that we are homœopathic physicians. But the majority of the committee don't urge, at the present moment, the adoption of the identical report which they submitted, but present another which is virtually the same thing, although changed in some particulars, and it leaves the same holes for running in false doctrine all the way through. My idea is to make white paper of it and let the report be laid on the table, and then the Fowler resolutions can be expunged, and we will shake hands all round.

Dr.———: I move the report be accepted.

Dr. Wildes: I move, as an amendment, that the report be accepted and the committee discharged, and that these resolutions of 1878, known as the Fowler resolutions, be now expunged from the books.

The President: You are covering too much in your amendment. The motion was that the report be accepted, and the amendment is that the committee be discharged. Will you make the other a separate motion?

Dr. Wildes: It belongs together, and should be taken together.

The President: I suppose Dr. Wildes understands that the acceptance of a report is equivalent to its adoption. To receive a report is one thing, but our latest authority on parliamentary law, Roberts, who is endorsed by Gen. Husted and others, holds that to accept a report means its adoption.

Dr. Wildes: Then I will change the language of my amendment, and make it that the report be received and the committee discharged, and that the resolutions of 1878, known as the Fowler resolutions, be expunged from the books.

Dr. Carleton: I hope every friend of homœopathy, and of peace and quietness, will vote yes on that.

Dr. Burdick: I am very sorry, indeed, to see the report and resolution coupled in this way. I don't believe it is conducive to the welfare of the society. I believe we should act individually and concisely in the matter, without any combining of principle or confusion in our action. I shall certainly oppose the amendment in the position in which it stands. I do believe I am a homœopath, and I believe I am a friend to homœopathy and this society, but I also believe to put the amendment in this position is going to be injurious to members of this Society. I believe in taking things separately and individually, and disposing of them in that manner. I certainly hope the amendment will fail.

Dr. Biegler: After hearing the report of the committee and minority report, my mind reverts to where we were before the Fowler

resolution was adopted. I was present then, and Dr. Wildes and I were the only members opposed to the adoption of the resolutions. We thought it was unnecessary, and we professed to adhere to the law we held up to the world as our guide. Now, the adoption of those resolutions was not necessary, and I could not ascertain any reason why they should be adopted. No reason was given at the time. We were well off as we were, doing what members of the society are doing to-day, professed homœopaths; and if others were doing the best they could, and failed to succeed in their treatment of patients, there was nothing to prevent their associating with us. We could extend the hand of catholicity to all, hoping and praying that we might improve in the knowledge of medical law and spent our time with them in its development and testing the practice. There was no necessity for the resolutions; they were perfectly useless and only created ill feeling, and I agree with Dr. Carleton that the sooner they are made white paper of the better. Then we shall take our true position before the world as true men, adhering to our principles and what we profess. Under present circumstances we have trailed our banner in the dust, and degraded it before the world, and become a mongrel lot, and given ourselves away before the world for some bad object. I think we had no reason to sacrifice our principles or the law we profess. There can be no cause for dissension or ill feeling by expunging the resolution and simply maintaining our true position before the world as homœopaths.

Dr. Wildes: Since discussion is allowed, I desire to supplement the statement of Dr. Biegler when he says he and I were the only two who opposed the resolutions, which were endorsed by the New York County Society. They have since been expunged there. Last year I tried to have them expunged here, and I knew if they got it to a committee it would prevent their being expunged. The matter went to the committee by a majority of one vote, although erroneously published by a majority of two. I claimed that these resolutions were either of value to good homœopathy or of no value; they have been shown to be detrimental to our progress; to be injuring us before the public, and before the old school of practice. We need them off the books. In order to prevent their being expunged, the matter went to a committee, and they unanimously agreed to their report, which was spread broadcast, as I insisted it should be. Unfortunately for some one there was a good homœopathist on the committee, and he managed to introduce so much good homœopathy into it that it was not stomached by some one, and here we have a substitute. Are we going on from time to time offering substitutes for resolutions? Let us wipe the slate off clean and begin again, as I urged last year, and that can only be done by starting where we were—and where we were, heaven knows, was good enough to build this Society up. We showed what we could do by the cures we were effecting, and by expunging these resolutions we shall stand just as we did.

Dr. Burdick: I wish to say one word in reference to the position I hold. I would like to vote on these separately, and I think, if the mover and seconder of the resolution will consent to receive the report and place it before this meeting, and then allow the subject to be acted on separately, I am ready to vote for it; but I oppose the combination of the two things.

Dr. Paine: It seems to me Dr. Wildes is in the same position as a great many of the friends of high potencies—they give their medicines,

and jump at a conclusion. Dr. Wildes desires to anticipate what we all purpose to do afterwards. If he will withdraw part of his resolution we shall all vote for it.

Dr. Wildes: What honor is it to me to have Dr. Paine move to expunge the Fowler resolutions?

Dr. Couch: As a member of the committee I am perfectly willing to vote for Dr. Wildes' proposition. It is not the way I would go to work to do the thing; it does not represent my ideas of what is apparently the best. I have only kindness for Drs. Wildes and Carleton, and I have entertained for them not only feelings of respect but of affection. If it is hard for them to digest, I will be ready to expung it. All there is of it in this matter is a grief between the members of this Society, as Dr. Biegler has stated, and there was no real necessity for the resolution. We entered on new ground, and involved the Society in an unfortunate predicament. While we agree on that, it is only a question of the judgment of men how we can get out of the position and have the world exactly understand it. We are not to have any trouble in the Society, and for one I would rather that the nine-tenths of the society should go to the one-tenth in regard to this matter of peace and harmony, than that the one-tenth should be permanently alienated because of a feeling of false pride. I have been sitting here thinking the matter over quietly, and I can see no harm in the gratification of our friends from New York by accepting their view of this matter. I shall cheerfully vote to accept the report and expunge the resolutions, as we have more to do now than we can get through in two days.

A motion was then made to divide the question, which was adopted by 23 to 12.

The question was put on receiving the report, and it was adopted. The question was then taken on Dr. Wildes' motion to expunge the Fowler resolutions, and it was adopted unanimously.

A motion was then made that the report be adopted.

Dr. Carleton: Now I should like to look at it for another year. I move to lay it on the table.

The motion having been seconded was put and lost.

Dr. Wildes: I trust the report will not be adopted. To go over the ground again and give my reasons, I should have to reiterate much that I have said. I want to call attention to one point; if it is worth adopting now, it was worth adopting last year, and now this year we are asked to adopt a report which is not a unanimous report, but a fixing over of last year's report. I oppose it for this reason, not because that I oppose those gentlemen, but because it has been shown that the bringing up of this resolution year after year is an interminable thing like the artillery and baggage train in the army stuck in the mud, and the tail of it is the Lord knows where. I think the most sensible thing the men and women in this convention can do is to vote these things down, for while they express our sentiments of homœopathy, we don't want them, not because we disapprove the sentiments they express, but because of the mischief they may lead to. Vote them down so that we may know where we are.

Dr. Doane: I hardly think it is fair to do that. I think I speak the sentiments of the State Society when I say the State Society felt bound to

expunge the Fowler resolutions, but I see nothing in the report that is objectionable. It is the result of an extended correspondence with the homœopathic physicians throughout the State of New York, and it expresses the feeling of the majority, and it is not excellent taste for the minority to find fault. I trust this matter may be terminated, and the way to terminate it is by the adoption of these resolutions. That leaves the question just where it ought to be left, and just where I trust this Society will leave it, and that is: the man who believes in our law of cure, and practices according to his best ability, is a homœopathist. I have been in this Society for twenty-five years, and have practiced, according to the best of my ability, *similia similibus curantur*, and I believe it the best therapeutic system, but I am a physician, responsible to my God and to my conscience, and do not hold it to be the only system. I hold it to be my duty when I stand at the bedside of a patient to do all that I can and adopt *every* means I know of to relieve a patient, and I shall do it in spite of any organization under the sun, and hold myself responsible to my own conscience. There I trust it will rest, and let it go forth that we want results, and the question is, do you prescribe according to our therapeutic law? If you do, you are entitled to the consideration and support of this Society everywhere.

Dr. Wildes: I take exception to some of the remarks of Dr. Doane. I don't say I adopt the sentiments of the report in all respects; I said in many respects they involve my sentiments and the sentiments of the homœopath. He hurls at us that we are not properly receiving the courtesy extended to us. We don't need that courtesy here, and I don't know what prompted him to make that remark, as we don't need it. As a question of homœopathy, Dr. Doane says he treats to satisfy his conscience by using any and every appliance. Now, the other appliances in his mind may not be able to hold a candle to homœopathy. I say in adopting this resolution we are opening a door that will lead us heaven knows where. We did not need them twenty years ago, and why should we need them now.

Dr. Doane: We did not need them twenty years ago, and we did not have these discussions. This question never came up, and we didn't have these gentlemen here to fight us. The question was our law of cure, and it is the question now. It was not whether you use this or that means of cure. The great principle has been lost sight of, and that is our law of cure. I don't want to have it lost sight of. The gentleman says I am not able to hold a candle to some of the greater lights. I bow down in humility, and I say the smallest star has a right to shine, and it would be very cruel in the sun and moon to wipe out these little lights. Please let us live! [Laughter.]

Dr. Burdick: I regret that the necessity for any resolution in this direction has ever occurred in this Society or any other Homœopathic Society. We had trouble enough through them in our county Society in the city of New York, but as the resolutions known as the Fowler resolutions have found their way into the Society and have been placed on the books, it does seem to me, after all the feeling shown by one and another, we can well afford to adopt the resolutions offered to us by the committee. I find nothing in them in any degree militating against homœopathy in

any way, shape or manner. It is in a measure, the adopting, as a whole, the law of *similia similibus curantur*, but gives us the right to practice surgery and the removal of poisons from the stomach and other places, and does it without conflicting in any degree with the principle *similia similibus curantur*. I hope the resolutions will prevail.

Dr. Carleton: Let me say one word of explanation of the vote I gave to lay the resolutions on the table. It was to dispose of the matter. I heartily concur in some of the resolutions, but in laying them on the table I thought we would wipe out the whole thing.

Dr. T. F. Smith: I can't see of what use the resolutions are. Dr Burdick says as the resolutions of Dr. Fowler were placed on the books, it is necessary some resolutions should be placed on the books to counteract them. Now they have been expunged from our minutes; and where is the necessity of passing such resolutions as these? I grant that the resolutions as a whole are unexceptionable, but it seems to me there are some loop holes there that we may at some future time be sorry we placed there. As an individual, I hold I have a right to use any appliance, or any thing I think best, for the relief and cure of my patients. I believe the law of homœopathy is the universal one, yet we may not have studied it all of us so that we may be enabled in all respects to prescribe homœopathically; and if we fail it is not to be laid to the law of Hahnemann, but to our own want of knowledge. Our duty is to administer to our patients, and if we don't know enough of the Materia Medica, and if we are not ready to prescribe to relieve the patient, I claim I have the right to use that which will save the life of the patient, be it homœopathic or not. But as a Society we have no right to endorse such treatment on the part of our members, and we are bound to live up to the law of *similia similibus curantur* and insist that they shall do the same. If we pass these resolutions we put ourselves in the position of the Eclectics, and our members may do anything they think best.

Dr. Wildes: I desire to call attention to one of the loop holes. In the third section of the report read to the Society a year ago and scattered broadcast the words "under the homœopathic law" were inserted. In the resolutions offered by Dr. Mitchell these four words are absent, making a very big loop hole.

Dr. Doane: One word more on these resolutions. My friend Dr. Smith insists upon it that he would use just such agencies as he thought fit to benefit his patient, and says still the Society should not tolerate it. It is a pretty poor church to adopt a code of morals that its members can all violate. I would not belong to such a church. We claim the right, and the gentleman says the Society should cover up the breach. Is that the case? No, sir; every physician within sound of my voice to-day will tell you those are his sentiments, that he uses those remedies which his judgment and conscience dictate, and if that be the judgement of every man let the Society stand on the liberal, high-minded, generous basis before the world, and say we stand behind our members and endorse their acts. I would not give anything for a Society that cannot be as manly as its individual members.

Dr. R. A. Adams: The delegate from Syracuse has spoken of the smaller lights. The great luminary has subsided, and I consider the

resolutions merely a compromise to clear away and remove the incubus, the nightmare which has been upon us for two years; and it is for the Society to say whether they will vote for these resolutions to follow us still. I believe in leaving it where it is, and then, as our friend from Syracuse says, we will have no occasion to quarrel any more. Better leave it where it was. We were harmonious then, and there is no reason why we should disagree to-day.

The previous question was then ordered, and the report of the committee adopted, 33 voting in favor of it, and 17 against it.

HIGH POTENCIES.

The next business was to receive the report of the committee appointed to co-operate with the Milwaukee Academy of Medicine, in testing the efficacy of high potencies, H. M. Paine, M. D., chairman.

Dr. Paine read his report.

Dr. Burdick: I move that we refuse to receive the report of the committee, and discharge the committee.

After considerable discussion the motion to reject the report was put and carried.

Reception of the American Institute.

Prof. Dowling, chairman of the committee on reception of the American Institute, said: Many of the members of the Society attended the session of the American Institute last summer, and therefore I don't think any extended report necessary. I will say the members of this Society received the members of the American Institute of Homœopathy, and did their best to entertain them, and stuck pretty closely to them until they went away. I have been told they had a pretty good time, in fact a jolly good time as many of them expressed it, but I should like, as one of the entertaining committee, to express my thanks to the other members of the reception committee for the assistance they gave me, and which was entirely unexpected, and for which I thank them. When the Institute was invited to Lake George, I had no idea I should receive any pecuniary aid in entertaining them; I expected to foot that little bill myself and had economized and deprived myself of the necessaries of life to entertain them, but I am just so much in. The members started a subscription, and before I knew it money came flowing in upon me until I thought I was going to be made suddenly rich, and was going to have more than enough to meet the expense of the entertainment. I had plenty, and was only sorry I had, because it deprived me of the pleasure, which would have been a pleasure, of defraying the expenses of the entertainment. I believe the committee did their work satisfactorily, and I ask for its discharge.

The report was accepted and the committee discharged.

Bureau of Clinical Medicine.

Dr. E. Hasbrouck presented the report of the bureau of clinical medicine, which comprised the following papers:

"Clinical Cases," by O. E. Pratt, M. D.

"Dead or Alive," by C. Bruchhausen, M. D.

"Notes on Chronic Gastritis in Children," by T. C. Duncan, M. D.

"The Utility of Medical Diversity," by Titus L. Brown, M. D.

"Glossitis," by M. A. Wilson, M. D.

"Diphtheria," by S. W. Skinner, M. D.

Dr. Couch called for the reading of the paper on glossitis.

The paper was read.

Dr. Boocock said the case looked to him more like one of Calomel poisoning. I can give you a true case of glossitis, my wife being the patient. The root of the tongue was inflamed, and the tongue swelled and protruded, and become so large and elongated that it had to have a pillow to rest on; it was accompanied with a sense of choking. *Kali chloricum* cured that. She had another attack years after.

A member: I would simply ask, if it was a case produced by Calomel, whether the doctor would have prescribed *Mercurius* to cure it.

Dr. Boocock: The question is a close one. I think when a physician was called in who did not, perhaps, take in the previous treatment, and reasoned from the symptoms, he would give a dose. *Mercurius* may produce the disease and cure the same disease. Take the case of poisoning with *Rhus*. *Rhus* will cure the poison.

Dr. Couch moved that the bureau be closed, that the papers be referred to the Committee on Publication, and that Dr. Hasbrouck be re-elected chairman of the bureau. [Adopted.]

Bureau of Surgery.

Dr. Carleton presented the papers in this bureau, which were as follows:

"Unusual History of Fatty Tumor," by E. Carleton, Jr., M. D.

"Cases from Practice, with Comments," by E. Carleton, Jr., M. D.

"The Topical Use of Sulphuric Acid in Necrosis," by H. I. Ostrom, M. D.

"Shock," by J. G. Gilchrist, M. D.

"A Case from Practice," by W. M. L. Fiske, M. D.

"Idiopathic Necrosis of the Pubic Bone," by C. L. Bagg, M. D.

"Clinical Cases in Surgery," by N. Osborne, M. D.

Dr. Hasbrouck moved that the bureau be closed and that Dr. M. O. Terry be chairman of the bureau for the ensuing year. [Adopted.]

Dr. Hasbrouck: I decline to serve again as chairman of the Bureau of Clinical Medicine, as I believe it better to change the chairmen every year.

Dr. Waldo moved that Dr. Hasbrouck's resignation be accepted, and that Dr. Osborne be elected in his place. [Adopted.]

State Board of Health.

Dr. Waldo: There is a matter of importance before the Society upon which some action should be taken, namely, the State Board of Health. The Senate Committee on Public Health will hold a meeting at 3 o'clock to-morrow afternoon, at which homœopaths will have a chance to state their views. I move that the following committee be appointed to wait on the Senate committee and urge such arguments as they think proper: Drs. A. S. Couch, A. R. Wright, C. E. Swift, H. M. Paine, S. H. Talcott, J. J. Mitchell, W. M. L. Fiske, W. C. Doane, and A. P. Hollett. [Adopted.]

The report of the Bureau of Mental and Nervous Diseases and miscellaneous business was then laid over until the next morning, after the election of officers, and the Society adjourned.

EVENING SESSION, EIGHT O'CLOCK.

The Society met in the New Assembly Chamber, Dr. Alfred K. Hills in the chair.

President Couch delivered the annual address, upon the subject, "Heredity and the Higher Duties of the Profession."

At the conclusion of the address, a vote of thanks to the President for his able address was adopted. Prof. Burdick moved that one thousand copies of the address be printed, and a copy sent to each member of the Society, in an independent volume. [Carried.]

Prof. Dowling gave an exemplification of the sphygmograph and discussed its value as an aid to diagnosis.

The Society then adjourned to attend the reception of Governor and Mrs. Cornell at the Executive Mansion.

SECOND DAY.

The Society convened at 9:30. President Couch in the chair.

Dr. Alfred K. Hills said he held in his hand a paper to which he asked the signatures of the members. It was relative to a committee which was asked to be appointed by the Legislature, the object of which was to remove Dr. Ordroneaux, State Commissioner in Lunacy.

Professor Dowling: I will say a word in regard to this, as perhaps many of you don't know Dr. Ordroneaux. In company with Dr. Talcott, I attended a meeting at Dr. Agnew's at which Dr. Ordroneaux had promised to deliver an address. We listened to it with much pleasure, and I firmly believe all who listened to it were impressed with the fact that Dr. Ordroneaux was a hard-working man. The object of this petition is to prevent his removal. He is a hard-working, honest man, and probably the best man for the position in the State.

The petition was then signed and sent to the Legislature.

Election of Officers.

The President announced that the first business was the election of officers, and the following was the result:

President—A. R. Wright, Buffalo.

Vice-Presidents—E. Hasbrouck, Brooklyn; N. Osborne, Buffalo; R. A. Adams, Rochester.

Recording Secretary—H. L. Waldo, West Troy.

Corresponding Secretary—A. P. Hollett, Havana.

Treasurer—E. S. Coburn, Troy.

Censors—Drs. A. W. Holden, G. W. Little, L. A. Clark, W. M. L. Fiske, J. H. Demarest, S. H. Talcott, C. E. Swift, M. O. Terry, G. B. Palmer, W. B. Kenyon, A. B. Carr, H. S. Hutchins.

For Regents Degree—A. R. Wright, of Buffalo; O. Groom, of Horseheads; Henry Minton, of Brooklyn; and W. C. Doane, of Syracuse.

The President announces the following bureaus:

Materia Medica.

J. J. Mitchell, M. D., Chairman, Newburgh; Drs. L. M. Kenyon, Buffalo; A. M. Piersons, New York; S. Talmage, Brooklyn; D. K. Mandeville, Brooklyn; A. P. Cook, Hudson; J. H. Stebbins, Geneva; T. C. Fanning, Tarrytown; D. S. Kimball, Sackett's Harbor; H. M. Paine, Albany.

Clinical Medicine.

N. Osborne, M. D., Chairman, Buffalo; Drs. O. Groom, Horseheads; L. M. Kenyon, Buffalo; C. R. Sumner, Rochester; Thomas Wildes,

New York; A. T. Hills, New York; Joel D. Madden, Sing Sing; C. E. Blumenthal, New York; A. W. Holden, Glen's Falls; E. Hasbrouck, Brooklyn; H. Minton, Brooklyn; L. B. Couch, Nyack; Walter Y. Cowl, New York.

Surgery.

M. O. Terry, M. D., Chairman, Utica; Drs. W. T. Helmuth, New York; W. M. L. Fiske, Brooklyn; H. Willis, Brooklyn; John Butler, New York; J. H. Thompson, New York; John C. Minor, New York; E. G. Rankin, New York; H. I. Ostrom, New York; H. C. Frost, Buffalo.

Mental and Nervous Diseases.

S. H. Talcott, M. D., Chairman, Middletown; Drs. S. Lilienthal, New York; T. L. Brown, Binghamton; W. M. Butler, Middletown; N. E. Paine, Middletown; A. P. Williamson, Middletown; C. Spencer Kinney, Middletown.

Pædology.

W. W. Blackman, M. D., Chairman, Brooklyn; Drs. C. L. Bonnell, Brooklyn; Hugh M. Smith, Brooklyn; Mrs. J. G. Brinkman, New York; Clara C. Plimpton, New York; C. M. Conant, Middletown; C. Ormes, Jamestown; S. E. Stiles, Brooklyn; H. Amelia Wright, New York.

Obstetrics.

A. P. Throop, M. D., Chairman, Poughkeepsie; Drs. E. Guernsey, New York; Robert McMurray, New York; J. R. White, New York; L. de V. Wilder, New York; J. H. Demarest, New York; O. Groom, Horseheads; A. P. Hollett, Havana; H. S. Hutchins, Batavia; N. R. Seeley, Elmira; H. Minton, Brooklyn; S. P. Burdick, New York.

Gynæcology.

Anna C. Howland, M. D., Chairman, Poughkeepsie; Drs. Catharine E. Goewey, Albany; T. L. Brown, Binghamton; T. Franklin Smith, New York; Alice B. Campbell, Brooklyn; Sarah J. White, New York; S. P. Burdick, New York; C. Ormes, Jamestown.

Climatology.

J. A. Biegler, M. D., Chairman, Rochester; Drs. A. S. Couch, Fredonia; J. de Vello Moore, Utica; M. M. Brown, Ithaca; R. S. Bishop, Medina; C. A. Beldin, Jamaica; A. W. Holden, Glen's Falls; T. T. Calkins, Hudson; D. F. Bishop, Lockport.

Ophthalmology.

F. Park Lewis, M. D., Chairman, Buffalo; Drs. C. Th. Liebold, New York; George S. Norton, New York; D. B. Hunt, New York; F. H. Boynton, New York; W. P. Fowler, Rochester; Chas. Deady, New York.

With invited co-operation of Drs. M. Macfarlan, Philadelphia; J. N. Anderson.

Department of Laryngology.

C. E. Jones, M. D., Chairman, Albany; Drs. E. J. Whitney, Brooklyn; J. B. Gilbert, New York; F. Seeger, New York.

Department of Otology.

W. P. Fowler, M. D., Chairman, Rochester; Drs. H. C. Houghton, New York; F. Park Lewis, Buffalo; W. S. Searle, Brooklyn; N. B. Covert, Geneva; J. H. Buffam, Chicago; F. H. Boynton, New York; Wm. E. Rounds, New York.

Histology.

Bukk. G. Carleton, M. D., Chairman, New York; Drs. C. A. Bacon, New York; A. Varona, Brooklyn; F. E. Doughty, New York; C. P. Alling, Bradford, Pa.; N. E. Paine, Middletown; A. P. Williamson, Middletown; E. Bagg, Middletown; T. C. Fanning, Tarrytown.

Vital Statistics.

A. W. Holden, M. D., Chairman, Glen's Falls; Drs. Walter Y. Cowl, New York; C. G. Clark, Troy.

Vaccination.

W. B. Kenyon, M. D., Chairman, Buffalo; Drs. A. S. Couch, Fredonia; O. Groom, Horseheads; C. Ormes, Jamestown; W. C. Doane, Syracuse; C. P. Alling, Bradford, Pa.; G. H. Greeley, Syracuse.

With invited co-operation of Dr. H. N. Guernsey, Philadelphia.

Necrologist.

H. D. Paine, M. D., New York.

REGULAR AND SPECIAL COMMITTEES FOR 1880.

Committee on Medical Education.

J. F. Gray, M. D., Chairman, New York; Drs. W. H. Watson, Utica; A. W. Holden, Glen's Falls; S. H. Talcott, Middletown; H. D. Paine, New York.

Committee on Legislation.

E. D. Jones, M. D., Chairman, Albany; Drs. A. K. Hills, New York; H. M. Paine, Albany; A. P. Hollett, Havana; M. O. Terry, Utica; N. Osborne, Buffalo.

Committee on Medical Societies and Institutions.

A. K. Hills, M. D., Chairman, New York; Drs. Asa S. Couch, Fredonia; E. Hasbrouck, Brooklyn; H. L. Waldo, West Troy.

Committee to report on the matter of an appeal by Dr. S. S. Guy to State Society from the decision of Kings County Homœopathic Medical Society.

S. H. Talcott, M. D., Chairman, Middletown; Drs. R. A. Adams, Rochester; C. Ormes, Jamestown.

Special Committee on Physical Diagnosis.

J. W. Dowling, M. D., New York.

DELEGATES TO OTHER SOCIETIES.

American Institute of Homœopathy.

Drs. J. W. Dowling, New York; A. S. Couch, Fredonia; W. M. L. Fiske, Brooklyn; A. W. Holden, Glen's Falls.

Connecticut Homœopathic Medical Society.

Drs. John J. Mitchell, Newburgh; B. G. Carleton, New York; E. J. Whitney, Brooklyn.

Illinois Homœopathic Medical Society.

Drs. C. E. Swift, Auburn; R. S. Bishop, Medina; R. A. Adams, Rochester.

Indiana Homœopathic Medical Society.

Drs. C. Ormes, Jamestown; O. Groom, Horseheads; N. R. Seeley, Elmira.

Iowa Homœopathic Medical Society.

Drs. J. Ralsey White, New York; T. F. Smith, New York; Henry Minton, Brooklyn.

Kansas Homœopathic Medical Society.

Drs. A. B. Carr, Rochester; T. T. Calkins, Hudson; S. E. Stiles, Brooklyn.

Maine Homœopathic Medical Society.

Drs. F. L. Vincent, Troy; G. C. Hibbard, Adams; M. M. Gardner, Utica.

Massachusetts Homœopathic Medical Society.

Drs. Henry M. Smith, New York; C. E. Jones, Albany; J. A. Biegler, Rochester.

Michigan Homœopathic Medical Society.

Drs. H. S. Hutchins, Batavia; C. P. Alling, Bradford, Pa; F. D. Ormes, Jamestown.

Minnesota Homœopathic Medical Society.

Drs. H. M. Paine, Albany; D. F. Bishop, Lockport; C. M. Conant, Middletown.

Missouri Homœopathic Medical Society.

Drs. L. M. Kenyon, Buffalo; S. P. Burdick, New York; C. R. Sumner, Rochester.

New Hampshire Homœopathic Medical Society.

Drs. N. H. Haviland, Fulton; W. E. Milbank, Albany; H. L. Waldo, West Troy.

New Jersey Homœopathic Medical Society.

Drs. Wm. M. L. Fiske, Brooklyn; E. Hasbrouck, Brooklyn; W. S. Purdy, Corning.

Ohio Homœopathic Medical Society.

Drs. F. Park Lewis, Buffalo; A. B. Rice, Panama; Jay Ball, Cortland.

Pennsylvania Homœopathic Medical Society.

Drs. S. H. Talcott, Middletown; A. P. Throop, Poughkeepsie; H. Bæthig, Buffalo.

Rhode Island Homœopathic Medical Society.

Drs. T. F. Smith, New York; Wm. Scherzer, New York; Arthur T. Hills, New York.

Vermont Homœopathic Medical Society.

Drs. N. B. Covert, Geneva; T. L. Brown, Binghamton; C. A. Beldin, Jamaica.

Wisconsin Homœopathic Medical Society.

Drs. M. O. Terry, Utica; J. W. Ostrom, Goshen; A. J. Brewster, Syracuse.

State Dental Society.

Dr. J. W. Cox, Albany.

Dr. Paine moved that the transactions for the next year contain a full list of the permanent and delegated members, and also the honorary members and officers.

Dr. Jones: If you fill your volume up with names you leave out papers, and I think the members of the Society would rather have papers on medicine than see their names. We cannot print only such a volume. If the State printed a volume of a thousand pages we could introduce the names of all the doctors in the State, but I think the papers are more important than the names of members.

Dr. Alfred K. Hills: I fully appreciate the remarks of Dr. Jones, but still, from my position as Secretary, I found, in correspondence with members, they desire the names of members of county Societies and this Society for the purpose of correspondence. I think once in three or five years it is desirable to do so, and it is very useful to societies of other States. We desire our minutes to be useful to other States, and therefore I shall second the motion that they be included with such other miscellaneous matter as the Secretary may consider of service to the Society. It is five years ago, at least, since we did print the names.

Dr. Groom: I fully concur and think it is valuable for reference.

Dr. H. M. Paine: The list, as formerly published in the transactions when issued by the State, occupied a good deal more space than necessary now. It can be printed in a condensed form and will not occupy much space.

Dr. Coburn: It is a matter that was brought up a year ago, and it was ordered that the miscellaneous matter should appear in the transactions. Perhaps I am the only one to blame that it does not appear. I requested the Secretary to withdraw a certain amount of matter that in my opinion was not necessary to be published and to bring the volume to a size that we could buy and yet be out of debt. I should be inclined to do the same thing another year. We have been obliged to withdraw a certain number of articles to keep the Society out of debt, but with the liberal support we have had I don't see why we cannot print them and keep out of debt this year.

The motion was then put and adopted.

MENTAL AND NERVOUS DISEASES.

Dr. S. H. Talcott, Chairman of the Bureau of Mental and Nervous Diseases, presented the report of his bureau as follows:

"Delusions of the Insane," by S. H. Talcott, M. D.; "The Relations of Occupation to Insanity," by W. M. Butler, M. D.; "Report of Post Mortem Examinations at the Middletown Asylum," by N. E. Paine, M. D.

Dr. Alfred K. Hills then moved that the papers be referred to the publishing committee with power, and that Dr. Talcott be elected chairman of the bureau for the ensuing year. [Adopted.]

MISCELLANEOUS BUSINESS.

Dr. Alfred K. Hills presented the following resolution, which was unanimously adopted:

WHEREAS, We have heard with regret that measures have been or are about to be instigated, asking for further legislative investigation of the management of our State asylums for the insane; therefore

Resolved, That we hereby express our confidence in the management of these asylums, especially that of the State Homœopathic Asylum for Insane at Middletown; and we sincerely deprecate any tendency to disturb these institutions, the organizations of which are based upon the most enlightened experience in this department.

Dr. Doane: I have a matter I wish to present to the Society under the head of miscellaneous business. I was expelled from our Central Society, during my absence, as an obnoxious member, and as I feel an injustice was done me I have brought the matter before the State Society. Our Central Society is ten or fifteen years old, and never had a creed, until 1878, when the Society came together and adopted one. A gentleman in Brooklyn, by the name of Wells, issued an article which was published in pamphlet form and circulated by members of the Central Society as an advertisement, which might have been well suited to a patent medicine vender, but was unworthy the Society. I felt it my duty to criticise it and publish the criticism in the papers, and for that criticism the brethren saw fit to expel me. I simply make the statement and ask the privilege of placing in the hands of the secretary the criticism of the Wells article, to be used as his judgment dictates in placing the matter before the profession.

Dr. Groom: I move the request be granted.

Dr. Swift: I cannot for the life of me see why the matter should come before this Society. I don't see that the Society has anything to do with it at all.

Dr. Doane: I think it has. I don't ask the Society to take any official action on it, but simply ask the indulgence and courtesy that belongs to a gentleman. It is a matter of interest and a matter of right, too. During my association with the Society I have come to feel you are all my friends, and circumstances have transpired during the past year that I may not have the pleasure of meeting you again. My associations with the Society have been such that I feel I belong with you to one brotherhood. I feel the standing and honor of every member of the Society belongs to and interests me, and if any organization seeks to place the name of any member in a dishonorable position before the profession and the world, it becomes of interest to me, and I will take cognizance of it, because I feel our interests are identical. I feel that I am entitled to this matter being considered, and ask that your authorized committee or Secretary be permitted to state the facts in the records of the Society if he sees fit.

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Dr. Jones: Dr. Doane is a friend of mine and I honor him in every way, but this Central Society has no standing with the State Society, and I think if we should take up the grievances that occur with every individual we should have nothing else to do. I think we had better not meddle with the grievances of societies; let them fight it out on their own ground. I think Dr. Doane is competent to do that. I don't think he needs our assistance to fight his battles. He has got the pluck to do it if we let him alone.

Dr. Hills: The matter will be safe in the hands of the publication committee. If they see fit to publish the paper they will do so.

Dr. Swift: I don't see why they should publish any thing that don't belong to them. This Society has nothing to do with it. You may just as well go into a man's family or into his political career and bring it up here. I know Dr. Doane is capable of fighting it out.

Dr. Doane: This Society is a corporation of the people of this State, and if the Central Society saw fit to expel me for conduct unbecoming a gentleman, I am unfit to associate with the members of this Society. If I am not fit as a gentleman and scholar to meet with the Central Society I am a pretty poor fellow to be here. If this Central Society is right, I ask the State Society to say to me and to the world: You are not fit company for us, and we ask you to go, and when you go we will put on you a mark as deep as the brand God Almighty put on Cain, and publish it to the world that you are not a fit member of society.

Dr. Groom: Dr. Doane is well known. He comes up here on the honor of a man and asks the publishing committee to consider the papers he puts in their hands, and to publish them if they see fit. I think he has the right to do that.

Dr. Mitchell: I am in full accord with the gentlemen who have spoken on this matter. We have got ourselves into serious trouble once by taking an *ex parte* statement and putting it on the records. This is a step in the same direction. We have no report from the Central Society, they can't report to us; they have no means of getting at us. While I have nothing against the gentleman who presents the privileged communication, I know nothing of the case and cannot take any notice of it, therefore I hope his request will not prevail.

Dr. Alfred K. Hills: My object in referring it to the publishing committee is to facilitate business; I think it is perfectly safe there. I am much in favor of what Dr. Mitchell says. The other matter came up in the shape of a discussion and had to go into the minutes; this comes as a paper, and if the committee don't consider it a proper one to be published it will not be.

Dr. Doane: I will relieve the Society, as I don't want to impose any burdens upon it at this time. I don't ask any personal favor of any man or body of men. I simply ask this now that when the facts in the case shall have appeared in our public journal, in the *Times*, which, by the way, is the best homœopathic paper we have, if the State Society thinks the Central Society did right that it shall appear on the minutes that they had the right to expel me; and if the reasons are not entirely conclusive that they acted wrongly, then I ask the Society, whether I am here or

not, to do one of two things, either put upon their record that the Central Society was recreant to its duty or expel the subscriber.

The matter then was dropped.

Dr. Adams: I have a resolution to offer in which we are all equally interested, and upon which we can vote unanimously.

Resolved, That the Homœopathic Medical Society of the State of New York unanimously presents the names of Drs. Asa S. Couch and J. A. Biegler for appointment as members of the State Board of Health, if that Board shall be appointed.

Dr. Biegler: This is one of the most important matters brought before the Society at this time, and should be approached with care. The necessity of representation by any one partisan of any party is of most importance, and it is necessary the most fit man and the most satisfactory should be appointed. I cannot conscientiously allow myself to stand as one of the candidates for that position. Though I might admit myself competent, I still know there are others in this Society deserving to be recognized far above me. I am comparatively a stranger here, and have done little, comparatively, for the Society. Therefore I would respectfully decline in favor of Dr. A. R. Wright, of Buffalo. I think these two men would be not only highly competent, but would be the best men we could possibly mention, and would carry weight and the respect of the profession with them. I am sorry my name has been mentioned here in that connection, because it is an important matter, as I have said, and we should be careful to select the right man on the start.

Dr. Swift: It seems to me this matter is a little premature. To be sure, it is in inception that we have a State Board of Health. There is such a bill in the Senate. If such a bill is passed, and we don't know as it will be, although probably it may be, it seems to me it will be well enough to foreshadow our choice. There are a great many homœopathic physicians in the State of New York, and whoever may have the appointing power may have a preference. Don't let us go too fast. We may, by going carefully, accomplish what we want—that is, representation on the Board if it is formed. It seems to me we are putting the thing a little too fast.

Dr. Talcott: In regard to the suggestion that this is premature, it seems to me this is the only time the men can be nominated. If the law is not passed our making the recommendations will do no harm, but if it is passed it is the proper thing to have men who would most ably represent homœopathy on the said Board. I believe it is the honest conviction of every man here that no one could be selected who would represent our interests in a more able manner than Drs. Couch and Wright.

Dr. Wright: I hope Dr. Biegler's declination will not be accepted. I think it only proper the names should be left just as named. Dr. Biegler has been on the Board of Health in the city of Rochester, and did good work, and was very active and prompt, and took the initiative in the Board before his allopathic brethren, and I hope his name will remain in.

Dr. Couch: It is not proper for any man to appear in a body of this kind with an affectation of modesty. I rise to say, while I am extremely gratified for the honorable mention of my name by Dr. Adams, that if my distinguished friend from Rochester is not fit for a place on the Board of

Health of this State, I am far behind him in that particular. Dr. Biegler, to my knowledge, has served with distinguished success in the Board of Health at Rochester, with the old school brethren, for several years. I have had no such experience, so that if Dr. Biegler deems it his duty to withdraw his name in this connection, I am certain it is my duty not only to follow his example, but to insist that the Society take cognizance of it and leave my name out. I don't know but it would be well for the State Society to recommend some names, in order that the Governor may be relieved of embarrassment if we have a State Board of Health, but I am not ambitious in this matter. I do know that there are many members of this Society and of our profession in the State who are far better fitted for the position than the humble country doctor from Chautauqua; I therefore thank my friend Dr. Adams and the other members, but respectfully decline the use of my name in this connection.

Dr. Jones: I hope the gentleman will not be so modest, and will accept.

Dr. Carr: I see no objection to presenting the nominations to the Governor in this connection, because the Governor may be thereby relieved in making his appointments. I think we have the resolution with the names of Drs. Biegler and Couch on it, and it is best to leave it as it is.

Dr. Biegler: If I have any experience in these matters, it amounts to this: My judgment is that the men now named are the right men and ought to be the men the Society should recognize as deserving of the honor by their ability, and that should be taken into account. On the score of attainments and ability, we could not certainly find the equal of Dr. Couch in the Board. Next comes Dr. A. R. Wright, who has for years labored in this Society and shown himself to be qualified, and is certainly entitled to it, and under no consideration would I allow my name to be used in connection with this vote.

A member: I am glad Dr. Biegler has alluded to the abilities and labors of Dr. Wright. The Society is aware that for a number of years he has labored assiduously to bring his bureau up to a point where it should be second to none, and his correspondence with sanitarians all over the State has rendered him peculiarly fitted for the position. The endorsement of Dr. Biegler shows him to be so, and it seems to me, as the thing now stands, it will be well to concede this to Drs. Couch and Wright.

Dr. Fiske: I move that the names of Drs. Biegler, Couch, and Wright be presented to the Governor to select from if the Board is established.

Dr. Mitchell: I would suggest, on this matter of making nominations to the Governor for appointment on the State Board of Health, that a special committee of three be appointed to make such nominations. If we have a Board of Health, and there should be vacancies, they can recommend persons to fill them. These are friends of ours, and no one I can name would have my hearty support sooner than the three gentlemen named; still I think, as we cannot await the action of the Legislature on the bill, it will be better to have a standing committee of three appointed, to make nominations in case they are to be made.

The amendment to recommend the names of Drs. J. A. Biegler, A. S. Couch, A. R. Wright was adopted, and the matter was then referred to the Committee on Legislation.

Dr. Waldo moved that the Committee on Legislation consist of Drs. E. D. Jones, Alfred K. Hills, H. M. Paine, A. P. Hollett, M. O. Terry, and N. Osborne. [Adopted.]

Dr. J. J. Mitchell then offered the following resolution:

WHEREAS, There exists an honest difference of opinion among homœopathists regarding the homœopathicity of high potencies; therefore,

Resolved, That there be established a special department consisting of five members, to be appointed by the President, to be known as the Bureau of Dynamic Medicine, for the purpose of collecting, classifying and reporting upon cases treated by attenuated remedies higher than the tenth or twelfth centesimal potency.

Dr. Jones: I move to lay it on the table. [Adopted by 13 to 5.]

Adjourned until 2 o'clock.

AFTERNOON SESSION.

The Society resumed, pursuant to adjourment, at 2:30 P. M.

Dr. H. Amelia Wright presented the report of the Bureau of Pædology, and the papers having been read, Dr. Waldo moved that the Bureau be closed and that Dr. H. Amelia Wright be the Chairman for the ensuing year. Dr. Wright declined, and the name of Dr. W. W. Blackman, of Brooklyn, was substituted. The motion as amended was adopted.

The report of this Bureau comprised the following papers:

"Regressive Infantile Paralysis," by J. Savage Delavan, M. D.

"Infantile Mortality," by C. Bruchhausen, M. D.

"Cross Babies," by Alice B. Campbell, M. D.

"Malformation Extraordinary," by C. A. Beldin, M. D.

When the report of the Bureau of Obstetrics was called for, it was found the Chairman was not present, and it was moved that the Bureau be closed, and Dr. A, P. Throop, of Poughkeepsie, be Chairman for the ensuing year. [Adopted.]

The following papers were presented under this Bureau:

"Anæsthetics in Labor," by A. P. Hollett, M. D.

"Puerperal Convulsions Cured by *Amyl nit.*," by L. A. Clark, M. D.

Dr. Anna C. Howland then presented the report of the Bureau of Gynæcology, and the papers having been read, it was moved that the Bureau be closed and Dr. Howland be elected Chairman for the ensuing year. [Adopted.]

The following papers were presented under this Bureau:

"Diagnosis in Gynæcological Diseases," by Sarah J. White, M. D.

"Against Vaginal Examinations with Speculum," by Alice B. Campbell, M. D.

The Bureau of Climatology presented its report, and on motion the Bureau was closed and J. A. Biegler, elected Chairman for the ensuing year.

Dr. F. Park Lewis presented the report of the Bureau of Ophthalmology and read a paper entitled "Progressive Myopia." The Bureau was closed, and Dr. F. Park Lewis, of Buffalo, was elected Chairman for the ensuing year.

Dr. Waldo said he had no knowledge of any papers being presented from the Bureau of Otology, and Dr. Lewis having explained an instru-

ment called the audiphone, the Bureau was closed and Dr. W. P. Fowler elected Chairman for the ensuing year.

Dr. Waldo said he had no knowledge of any papers from the Bureau of Histology, and no member of the Bureau being present, he moved that the Bureau be closed and Dr. Bukk G. Carleton be re-elected Chairman for the ensuing year. [Adopted.]

Dr. Waldo said Dr. Holden, Chairman of the Bureau of Vital Statistics, had written him stating his inability to be present or to present any papers. He therefore moved that the Bureau be closed and that Dr. A. W. Holden be continued as Chairman for the ensuing year. [Adopted.]

Dr. W. B. Kenyon, Chairman of the Bureau of Vaccination, presented two papers entitled "Vaccination," by J. C. Morgan, "Baehr on Vaccination." They were read by title, the Bureau closed, and Dr. Kenyon re-elected Chairman for the ensuing year.

Dr. Waldo said no report was presented from the Bureau of Medical Education, and he therefore moved that the Bureau be closed and Dr. J. F. Gray be elected Chairman for the ensuing year. [Adopted.]

Dr. Throop read a paper on the water supply of Poughkeepsie.

Dr Groom: I would like to say just one word on this subject, in reference to a filter which may not be familiar to all. I have adopted in my cistern a mode of filtering very much easier and nicer than generally used, and any one can put it in the cisterns they have with much less trouble than charcoal. That is a brick filter. It may not be known to all that water will filter through brick very easily, and it makes the most perfect filter there is. To illustrate it, as most of the cisterns are made round, you can have a curved arch made so that the pressure comes on the convex side, the arch to be made of one thickness of brick, laid well in water line, which will operate as nicely as can be, and those of you who wish to have a filter in the cistern can do it very cheaply, for a mason can do it in half a day. You have only to be careful to lay the bricks perfectly tight.

Dr Boocock: If it be true that bricks form such a good process of filtering, it is important that cisterns be built of something else than brick. If you can filter through brick, you get the water in your cistern impregnated from the soil, by the water filtering through the brick. I think we might spend a profitable half hour by discussing this matter of pure water.

Dr. Throop: I was just going to ask a question of Dr. Groom, and that is if he did not omit to state that the brick filter is not to be water lined on either side, whereas the cistern is water lined inside, which meets the objection of Dr. Boocock, as it prevents the water flowing through.

Dr. Throop: There are several firms in England that for a long time manufactured a portable filter constructed on precisely the same principle. The filtering power of ordinary brick is well known and I am glad the subject came up. The artificial filter made by the company in England is used largly and gives good satisfaction. The material of which it is made is patented, but it is something of the nature of brick. If the paper I have read brings out something in regard to the contammation of wells, I shall be glad. I apprehend that very often in the country where the sty and dwellings are located dangerously near the well, it has had a great deal to do with the virulence of many of the diseases. I remember a few years ago in Palmyra, many people received water from a stable in the

vicinity, although it was not known at the time, and they became sick, and finally there was a typhoid case, and all of those who partook of the water of that well were affected, all of which cases terminated fatally.

Dr. Boocock: In confirmation I would relate a case that took place in England during the first years of my practice where the churchyard was on the top of a hill, and in the valley near a brick-yard was a well of water. It was in Staffordshire, and the water of that well was so nice and soft that no one would make tea with water unless it came from that well. I believe it is a fact that in proportion to the amount of animal matter the water will contain it is soft and smooth, and its drawing properties are stronger. We had one of the most fearful scourges of typhoid fever, the most malignant I ever saw, the body in some cases becoming putrid, and a large proportion of the people died. The water was sent to the Government analyst and the well was closed. It was the clearest, purest looking water you could find.

Dr. Howland: The town of Ithaca in this State exemplifies the evil of drainage from churchyards. There are many of the students who attend the university who are gentlemen of limited means, and endeavor to get through the college with as little expense as possible, and take rooms in the lower part of the town. They are learning through a sad experience that many who do that suffer from typhoid, and they must increase their expenses to save their health, and keep away from graveyards. In the lower part of the town the water is so impure that the residents suffer from typhoid.

Dr. Throop: Have there been any tests made?

Dr. Howland: I think not.

Dr. Groom: I am glad this matter has come up, as it is very important. I think it should be the object of the physician as well to keep the people in good health as to cure them when sick, and one of the crying evils of to-day is bad ventilation. We breathe in more poison than we drink in, and my observation is that families who cram three or four in a small room without ventilation, and sleep in it every night, that family when taken with disease inclines to a malignant form. We cry out about bad water, but few think that they poison themselves more in one night by sleeping in a close, unventilated room, than they can get rid of by being out in the open air during the whole of the next day. We should not wait for any committee to report, but study up the question of ventilation and have it introduced into schools and in churches, and try to induce people to see the difference between ventilation up at the top instead of below, and show them that a house can be kept warm and yet be properly ventilated. This system we should look into, and I would say that air and water combined are the two most important matters we can consider.

Dr. Brown: This subject seems to come up late, but it is what we ought to have been talking about. We have always been looking for the cause of disease, and always look far away when the cause is near by. Very few attempt to analyze the air about us, to see what its influence is, for bad or good. We talk about drinking muddy water with horror, but it is a fact that we are breathing muddy air, and it is very often the case that the clearest water contains the greatest amount of poison. A circumstance occurred last May that I will mention. A physician called me in con-

sultation in a case, and I said to him, do you know where they get their water? He said yes; it is the most beautiful spring you ever saw. We went to it, and it was clear, bright water, and we traced it to a barnyard that had not been cleaned out in two years. The manure was covered with blue mould. I said to him: You will have to boil that water or get some other water, or the patient will die. I referred him to Fox's book on "Air, Water, and Food." The result was, we ceased using the water and gave the family *Sugar of milk* for two weeks, and in less than four weeks they were all well. The diarrhœa and quick pulse changed in two days. I merely want to show that patients can be cured by examining into the cause of the disease. How many of us examine the air we breathe, the water we drink, or the food we eat? or do we look for a remedy without knowing one word about the cause which produced the disease? Remove the cause and the patient will get well. Whether you are old or young you can change the condition of your life by changing the condition of the air. We could change the air in this room so that we would all get quarrelling in half an hour, by increasing the quantity of carbon. We live in filth and consume it. The only proper ventilation is from the base of a room, not the top. I have tried it, and this morning I was mean enough to suggest to the superintendent of the penitentiary that if he would put a register in the base of the chimney in the room where the convicts work he would get rid of the smell in the room. The heavy carbonic acid gas and the fœtid matter will be thrown down, and it can only be carried out that way. If our food is properly cooked we can digest it if we have sufficient oxygen to do, so; and all our dreams arise from eating too much carbonizing food, and we have too much carbonized blood in the head. You take a man who has been near drowning, and been brought to, and ask him what his thoughts were, and he will tell you that a panorama of all he had done passed before him. That is owing to carbonized blood. So it is with people who see their aunts and uncles. Where that is done you will generally find it is in a room ten feet square, with the windows closed up with a blanket, and soon the pure air is exhausted, the blood becomes carbonized and a man says, "I see my aunt." I told a man to shut his eyes and he would see the same thing, and he replied: "Yes I see it." I went to the door and opened it and let in the fresh air, and the uncles and aunts went off and they didn't see them. That was a case of carbonized blood in the head. So it is if a man turns his head over a high, shirt collar, and keeps it there so as to impede circulation, he will see a spook. These things are close by us, and we can demonstrate it to patients, and remove them. People sleep in rooms from which oxygen and fresh air are excluded, and they breathe and rebreathe the same air and become sick. You want clean beds, fresh air, and well ventilated rooms and a good physician, and then you have life. Instead of removing the causes which are close by, we look further, either above the windows or beneath the water.

Dr. Throop: I will simply say I am exceedingly pleased that these remarks have assumed so practical a turn. I think the more we have upon these subjects the more likely are we to give them the prominent place in the hygienic treatment of the sick their importance demands.

Dr. Smith then offered the following resolution, which was unanimously adopted:

Resolved, That this Society cordially approves the principle of the bill introduced into the Legislature by Senator Jacobs, so far as it provides that there shall be no discrimination against any chartered medical college of this State, or students of such college, in the furnishing of material for dissection or privileges in public hospitals.

Dr. Throop said he understood Dr. Brown had a brief matter he desired to call attention to under the head of the Bureau of Obstetrics, and moved the Bureau be reported. [Adopted.]

Dr. Brown: For twenty years I have employed something in my own practice that I have never made public, only to my patients, and it is with reference to an important matter—that is, the treatment of after-pains without remedies. My course has been this, and I discovered it in a patient who had spasmodic pains to such a degree that she almost went into spasms. I said: Lie perfectly still, and don't stir a muscle until they stop. I have tried it repeatedly with all such cases, even if I had to sit with my patient five or six hours. Instead of contracting the muscles of the hands and straining, they are to be perfectly still until the pains go away, porvided, of course there is no disease of the womb. I believe in giving no remedy, with the exception of rest, in the treatment of after-pains. By forcing the contraction of the other muscles you contract the muscles of the womb and induce pain.

President Couch reported that the committee appointed by the Society to wait on the Legislature relative to the Board of Health had discharged the duty devolving upon them; had had a very pleasant interview, and had listened with mingled feelings to remarks from Senators, but they had done what they could as wisely as they were able, and asked to be discharged from the further consideration of the subject.

Dr. Boocock moved that the report be received with thanks and the committee discharged. [Adopted.]

Dr. Wright said he wished to read a paper on "Malaria," which he had received.

Dr. C. E. Jones described a new instrument and exhibited it to the Society.

Dr. H. M. Paine said he had been furnished with a copy of a bill now before the Legislature, which he would read, and move it be referred to the Committee on Legislation.

The matter was referred to the Committee on Legislation.

Dr. Jones moved that this Society return thanks to the retiring officers for the efficient manner in which they have discharged their duties.

Dr. Swift seconded the motion and it was adopted.

President Couch, in response, said: "I have to say I feel grateful for this expression. The duties devolving on the President of the Homœopathic Medical Society of the State of New York are many, varied, and onerous. To discharge them well requires brains; to discharge them at all requires much time, care, and faithfulness. Elected on impulse rather than on the best judgment of the Society, I have done the best I could with all the influences surrounding me, in the interests of homœopathy. What I have done you have knowledge of; what I failed to do you also

know; but I hope, in retiring from the position and giving place to a gentleman from my own section of the State, of whom I cannot speak as I should want to, I shall retire with the good feeling of the members of the Society, and the earnest good will of all, whether I have appeared to be arbitrary, arrogant, or in any other way unpleasant, in the discharge of my duties. I am greatly obliged to my friend Dr. Jones and the Society, for voting the resolution of thanks, so far as I am personally concerned."

The Society then adjourned *sine die.*

III.

Proceedings of the Twenty-Ninth Semi-Annual Meeting, Held in Brooklyn, September 7th and 8th, 1880.

The Twenty Ninth Semi-Annual meeting took place at the City Hall, Brooklyn, on September 7th and 8th, 1880.

Dr. A. R. Wright, the President, called the meeting to order, and prayer was offered by the Rev. Dr. Farley.

Dr. P. P. Wells, of Brooklyn, then came forward and said: Mr. President and gentlemen of the Homœopathic Medical Society of the State of New York. It has been made my duty by the Committee of Arrangements of the Homœopathic Medical Society for the County of Kings to give you, on their behalf, the word of hearty welcome. In the discharge of this duty, permit me to say our welcome to you is not because of our common citizenship of a great commonwealth, nor because we recognize in each other the bond of a common religious faith; nor because of our common brotherhood of a common race, nor because of any attainments you have made, or may be supposed to have made in any department of general science however great. It is from none of these considerations that our greeting of welcome takes its inspiration. This comes in all heartiness from the fact that we recognize in you, as here assembled, and in each of you, the embodiment of a great truth, in which the welfare of a race subject to pains and sickness is so largely concerned. Our greeting takes warmth from our consciousness of a common faith in this truth between you and us. We have all received it as God given, and have by our presence here declared our allegiance to it. We have recognized in it a law of healing of supreme authority. We welcome you to our fellowship in the faith in this law, as those who have consecrated their lives and powers to advancement in the knowledge of it, both in the profession and in the community, and to its faithful administration in all your endeavors to relieve suffering and save life. We look on each of you as living representations of this law, with all its possibilities, and each to his constituency pledged and bound with us to see to it that neather it nor humanity suffers by reason of whatever of ignorance, idleness, careless-

hess, or any other sin which may easily beset us. You and we acknowledge this law to be God given, and that therefore to it we owe obedience. Our welcome to you to day is as to loyalists to this law. In this character we meet you as brothers. In this character we would join you, while together, in endeavors to gain new knowledge and strength so needful for the right administration of this law. For this we understand we are now met together, that we may aid each other in increasing the light within us, which light is a knowledge of the law. As homœopathists, where we speak of "medical science," it is the science of this law to which we refer. As physicians, we have to do with other and valuable sciences, and if wise physicians we shall see to it that each of these is referred to its proper place; that no one of them is put to do the office of another, foreign to its own, and least of all to assume the place and authority of our supreme law. The law on which our science of therapeutics is founded, like other laws of like origin, while it admits of aids to its more perfect administration whatever of help correlative sciences may afford, gives place to none in its supreme function of choice of remedy in our clinical duties. In these it is law with which we have to do, and the language of all natural law is inexorable—thou shalt, or thou shalt not—and from this it allows no appeal. We remember it was faith in the verity, authority, and practical value of this law that gave motive to the creation of the organization we now receive and welcome. In that faith we of the County Society join our breathren of the larger body who represent it in the state. In it we find the inspiration which brings from our hearts to our lips the word *welcome*, which on its behalf I am commissioned to speak. We bid you welcome to our fraternal regard, our confidence, our sympathies, and to whatever of endeavor we may be able to bring to the advancement of the objects which have now brought us together. In the spirit of a common brotherhood, we now and ever bid you God speed in all your endeavors to perfect a knowledge of this law, of the agents it employs in its beneficent work and to gain the increased skill so needful for its perfect administration. In the successful prosecution of these endeavors we may be sure of the blessings of thousands ready to perish, and of the approval of all the good."

President Wright, in responding to the address, said: "As the President of the New York State Homœopathic Medical Society, it gives me pleasure to thank you, sir, for the welcome that has been given to this Society. I consider this Society is honored by the welcome that has been given by this veteran of homœopathy, the senior member of the homœopathic branch of the medical profession in Brooklyn, I believe. We are glad, more than glad to hear his positive ringing words again in our ears and I hope it may be many, many years that we shall have with us the counsel of our esteemed friend in the sessions of this body. To the Brooklyn physicians I would say we thank you for your welcome. We feel some of that kindly gratitude which is the lively sense of favors to come. You have invited us here, have held out inducements to us to come, and we begin to feel, as we have known of your city of homes, your city of churches, and your city of large means, we begin to feel a little of the largeness of your hearts and are glad to be with you. I think I can express that as the sense of the Society. We again thank you for the welcome and general expression

given us by the physicians of Brooklyn. We are now ready in the order of business to proceed to the regular exercises of the Society. I suppose the first thing in order will be the appointment of a committee on credentials. If there is no objection, I will appoint as such committee Dr. Blackman, of Brooklyn and Dr. Carr, of Rochester. The next business in order is the reading of communications. Are there any official communications to the Society?

Dr. H. L. Waldo, the Secretary, read communications from Dr. A. S. Couch, of Fredonia, Dr. H. D. Paine, of New York, Dr. W. P. Fowler, of Rochester, Dr. A. P. Hollett, of Havana and Dr. J. P. Geppert, delegate from the Ohio Medical Society, expressing regrets at their inability to be present.

Bureau of Laryngology.

No report was presented from this Bureau.

Bureau of Mental and Nervous Diseases.

The Secretary said two papers had been promised one by Dr. Selden H. Talcott, of Middletown, on "Meloncholia with Stupor," and the other by Dr. C. Spencer Kinney, of Middletown, on "The Insane Breath," but neither of the authors were present, and the papers had not been received by the Secretary.

The Bureau was passed.

Bureau of Paedology.

Dr. W. W. Blackman of Brooklyn, Chairman, said the following papers had been received:

"Peculiarities of Infant Anatomy, Physiology, and Digestion," by Dr. H. L. Waldo, of West Troy, N. Y.

"Muriatic Acid in Children's Diseases of the Digestive Organs," by Dr. Edward Crauch, of Erie, Pa.

"Gangrene of the Mouth and Vulva, with Cases," by Dr. Edward Chapin, of Brooklyn.

"Modification of Diathesis," by Dr. Clarence M. Conant, of Middletown, N. Y.

"Acid and Alkaline, Children and their Treatment," by Dr. T. C. Duncan, of Chicago.

All but the last two papers were read.

On motion the papers of this Bureau were referred to the committee on publication, and the Bureau closed.

Bureau of Clinical Medicine.

The report of the Bureau of Clinical Medicine was then called for.

"The first paper read was on "Latent Medication," by Dr. Wells, of Brooklyn, and at its conclusion discussion was invited.

Dr. Boyce: If it be in order, I would ask the gentleman to state the remedy he gave in the first case and in the last one also.

Dr. Wells: Rhus tox 30 in the first case and Colchicum in the second.

Dr. Boyce: Will the doctor state how often the remedy was repeated in the first case?

Dr. Wells: It was about thirty years ago, and I have had a great many things to remember since then, and I do not recollect.

Dr. McMurray, of New York: I have listened with great interest and pride to the paper just read, as I do to all papers from that source. The position inculcated there should be tought to every student of medicine, because I do not know anything that tries a man's faith in himself and tries his faith in the system of practice, that tries his influence over his patients like prescribing day after day for a case like that which has been described and see no improvement, and yet I fully believe that it is a principle that lies at the very foundation of success. The experience of the past shows it is necessary and important that it should be taught and should be laid before every man who is preparing for the practice of homœopathic medicine, for without it he may run wild, he becomes confused; things are mixed, and it is hard work to straighten them out. But then there is another thing that comes right in there, if Dr. Wells will excuse me for saying so, which renders it most extremely difficult to carry out his theory; that is we are not all Dr. Wells. There is where the trouble lies. There are very few of us who can go into a sick room, and hold the family and patient day after day without any improvement being visible. I can't do it to save my life, and never could. I must see some effect. I don't say that there are not those who could, but to go into a strange family to a case of imminent danger of death, and hold that patient fourteen days without any apparent improvement is what I can not do, and I fully believe it is only those blessed by the Almighty with a peculiar constitution and temperament that ever can. In the first place there are very few men that can have the inherent faith in themselves that will carry them through it. It is hard work to get it. That requires years and years of practice and experience to get to just such a state. And yet I commend the paper to the consideration of every man, and especially every young student, because it is a thing to be aimed at, and the nearer we come to it the better we will be.

Mr. Wells: One word in regard to my friends criticism on what I have said in my paper. There is one point I wish to impress on all your minds and especially on the minds of the younger members. Be sure you have got the best remedy, and then give it and let it alone. I say to the younger members of the society, find out the remedy that is most like the disease you have to treat and don't change that unless you can find one more like it. I take it for granted that the first selection is the most like, and that is the fundamental law of homœopathic practice, and that is the principle I wish to inculcate in the paper.

Dr. Boyce: There is one point in this paper which perhaps I did not get, and which I should like to have repeated if it was mentioned whether he gave one single dose and waited fourteen days, or gave it every day or three or four times a day. It seems to me that matter is one of serious importance.

Dr. Wells: I did strike the principle involved, but did not mention the repetition of the doses. During the process of latent medication there is necessity for repeating the dose. I repeated it once in four hours; that is my practice in typhoid fever. There are cases where it is best to give one dose and let it alone, but those are chronic cases, not cases of typhoid fever. Repeated impress is what is desired. You give a dose at 9 o'clock and by 12 it will have expended itself; he then wants another, and these

doses it is expected will keep the patient in that state which will enable him to respond to the curative properties.

Dr. Boyce: There is no question that interests me as much as the repetition of the doses. There is nothing that proves of so much importance as the repetition of the doses. The selection of the remedy is not of so much importance, and has not troubled me so much, and I am very glad, at this time, to get Dr. Wells' views on this point.

Dr. Varona: Of course I need not say I am very much pleased with Dr. Wells' paper, and shall always try to abide by his advice, but it seems to me there is not sufficient exactness about what he tells us to constitute a law, while there is a law which answers the purpose to the letter. Dr. Wells tells us when we give the first remedy we should stick to it until we are satisfied it is not the right one. I would go a step further back and say don't give your remedy until you know you have got the right one. If it takes you just as long to know what the exact remedy is; if it takes a day, or two days, or ten days, I would rather not give any remedy than pin my faith to the wrong one. If the remedy is answering in nothing and we have no indications for another, we have no means of ascertaining if it is the right one, and if we have the means of ascertaining the indications it means we have not the right one, because it shows no results.

Dr. Wells: The patient gives you indications, but I say you must be sure you have the right remedy. We have the *materia medica* before us, and we must only fulfill the principle of *similia*, and prove the fact that the first remedy is right, because of the similarity it will continue to be right until the change indicates another, which will be more right, and that is to be followed unless you commit the extreme folly and give that which is less than the best in substitution for the better.

Dr. Boyce: I would like to know the potencies Dr. Wells recommends in this case?

Dr. Wells: I am very happy to answer questions always, and I have no quarrel with any man on the matter of potencies. I will tell any man here present, and this is the principle which underlies the whole thing, that just in proportion as you can get your remedy like, give it high, don't be afraid. The higher you give it the better will be your result, so long as it is in reason. At the time I treated this case of typhoid, there was nothing higher than the 30th, and the patient got it, I have never succeeded in going from a higher to a lower. Having made the selection, give it high, and failing in the result, I have never obtained the result by going lower. I know some of my friends have, whose testimony is to be received and honored, but it has never occurred to me. I have ceased to give remedies in low numbers almost entirely for years, and this because of the revelations of practical experience. I almost never now give a remedy in a low number. I can say in all truthfulness that I never saw a satisfactory case in my life, clean cut and wiped out, with a low number. I don't say this has not been in the experience of others, because I have reason to believe it has been. If you can get an exact picture of what my friends call a cure, and mine, I don't believe they will be exact *fac similes*.

The President: This question of the selection of doses is one of vital importance to the Society. We will linger a little longer on it, if the

older members wish to make a few remarks. It is of the greatest importance, and the young practitioner feels it.

Dr. Searle: I want to say just one word in connection with what has been said. Of course every practitioner takes very great interest not only in the medicine that he gives, but the condition in which he gives it, and wishes to know which is the most successful, high or low potencies. We have testimony from individuals of various kinds. The fact I wish to state is this, well known by all of you, that in your cities, and certainly in this city, every physician must give a certificate, on a death, of the cause of death. Some years ago I took up the books of the Board of Health in this city, with reference to statistics of death from different forms of disease. These statistics were afterwards published by the Homœopathic Mutual Life Insurance Company, and in the course of this investigation it occurred to me, as the names of various physicians were before me one year, to take up some of our leading physicians here, and note the number of deaths charged to each, and knowing something about the amount of practice in the community, and the amount of practice they had, I was enabled to make some comparative estimate of their success. One thing struck me very forcibly. This was in 1872. One of our most prominent physicians, who has a very large practice, and almost never or never used a high dilution, was charged with one death that year. I took somewhat of a list that year; I will merely say that of three others that I knew, used high dilutions almost altogether, and who had about the same amount of practice, and in the same class of people, one was charged with ten deaths, another with fourteen, and another with about forty.

The President: If there are any further remarks on this subject, the Society will be pleased to listen to them. If not, we will pass on to the reading of the paper by Dr. Jennings, on "Irritants and Stimulants in the Practice of Medicine."

Dr. Ella A. Jennings read her paper, and at its conclusion was warmly applauded.

The President: You have heard the valuable, interesting and learned paper. Is there any one who desires to make any remarks upon it?

Dr. Searle: I do not propose to discuss this paper, it would take too long to do it. It is certainly an able statement of one side at least of the case. A short time ago I brought to your attention a test with reference to which was most successful in practice, high or low potencies. I present you a similar one now with reference to the use of tobacco. Sir John Sinclair has published a book on the use of tobacco as acting upon life, and it occurred to him to take the pension hospitals of England, where the government gathered together the remnants of her armies, as a basis on which to found his calculations. He found one hundred and fifty men over eighty, thirty-five over ninety, and four over one hundred, and every mothers' son of them had used tobacco all his life.

Dr. Jennings: That does not uphold the use of tobacco. There was the case of a noted opium eater, who lived to be over a hundred, and every night took enough opium to kill two ordinary men. If he had not used it, he might have lived to be one hundred and fifty years old or more.

Dr. Searle: But it must be remembered that those in the hospitals were

the remnants of the armies of England. Those who had not used tobacco were dead.

Dr. Boyce: Not wishing to find fault with the address, there are one or two questions in my mind on this subject, to which I should like to refer. In the first place, if there are cases where those who drink become fat, it is equally true that in quite a good many cases they become lean instead of fat. The next question is, the lady, as I understood her, said that liquor calls for a good deal of water. Now is it the water or liquor that causes them to puff up? That is the only question I wish to call to your mind.

Dr. Jennings: The chemical constituents of alcohol are so well known that we trace the results to them. While water is known to have elements which do produce fat, yet where that is the case it is due to the carbon of the alcohol, to which is due the result.

Dr. J. H. McDougall then read a paper on the "Homœopathy of Shakespeare," which was referred to the Committee on Publication.

The Annual Volume.

Dr. Waldo: I desire to say that the officers of this Society have been in a little doubt and trouble as to what course they should take in publishing the Annual Volume of Transactions. It has been customary for the Society to present the annual report to the Legislature, and until 1872 it was printed, and we received a thousand copies for the use of the Society. Since then they have not printed any for the use of the Society, but have printed 807 copies for their own use. When the type was set up, the Society made a bargain with the printer, for a small sum, to print as many as were needed. This year the printing was given out in another way, and the printer discovered that our Society was not required to present a report to the Legislature, and consequently they will not print our volume either for the Legislature or for ourselves. That will increase the expense three or four hundred dollars. Before this discovery was made, we had presented the papers to the Legislature and attempted to procure the passage of a bill calling for the printing of five hundred copies for the use of our Society. It passed the Assembly, but failed to pass the Senate. The State Printer refused to deliver back to us the manuscripts. After using all persuasive measures to get possession of them, I replevined the papers, and got possession of them. They are in my possession until the 21st, when the case will be tried. It was claimed that when we presented them to the Legislature they ceased to be the property of the Society, and became the property of the People of the State of New York, even if they were not printed. The question now is, how the money shall be raised. It has been customary for the Treasurer to secure subscriptions in the early part of the year, and he says now he does not think at this late day we shall be able to raise enough to print a volume. It will be necessary for us to raise three or four hundred dollars to publish a book of three or four hundred pages, and Dr. Coburn wished the physicians to give expression to their opinion on the subject. He thought this year's report had better be combined with next year's, and the report for 1880 and 1881 be issued in one volume.

Dr. Wells: With what unanimity do the members of the Society respond to the calls of the Treasurer for funds, after paying their regular dues?

The President: I presume the Treasurer will be the best able to respond to that inquiry. I have been informed that there is a great deal of back dues on the part of the permanent members.

Dr. Wells: I take it that the readiness evinced to contribute money to the Society is good evidence of the interest felt. I would suggest to the officers that, if they don't have the dues properly and promptly paid, the Society defer publishing entirely.

Dr. Waldo: There is now in the treasury only about $150, which I think is more than there has been in the treasury in many years. The disposition of the members to pay their dues has been greater during the last few years than in previous years. There has been no special effort made this year to secure subscriptions.

The President: I would remark that it requires unanimous consent to bring up any matter of business at this session, but the Secretary and others of the committee on publication thought it was an important matter and rather desired to have the Society take the responsibility of delaying the printing of their own papers for another year. Does the Society wish to give expression to its opinion, there being I presume unanimous consent.

Dr. Hasbrouck: I move that the publication of the volume for this year be deferred until next year.

Dr. Jones: I second the motion. I would say there is a very large number of very valuable papers that are now in the possession of the Secretary and ought to be published, but for one who has been in the Society and has had experience in getting this Society out of debt, I would rather defer the publication of those valuable papers until the Treasurer has accumulated enough so that he can publish the transactions without bringing the Society into debt and embarrassing it. To-day there have been a number of papers read that ought to be published, but they can not be without embarrassing the Society very much. There is no need of the Society being in its present condition. There are permanent members sufficient to meet all expenses, if they would pay their annual dues, and to publish yearly, without expense to any one, the transactions of the Society, furnishing each member with a copy; but there seems to be a disposition on the part of the physicians of the State of New York, who are anxious to become permanent members, to pay the $3 which is their first year's dues, and then after that to refuse to pay the annual dues of $3. I was Treasurer one year, and I would not hold the office another. If you write to permanent members of the Society for their annual dues or even to societies who send delegates, the reply you get is they will not pay, and do not wish to continue their relations with the Society. While no law is passed by the Society by which these delinquent members can be dropped, this state of things must continue, and in every volume of transactions their names are published as permanent members. If there is any glory in it those members get it, while the Society receives no benefit from them. I am opposed to running the Society in debt, and therefore second the motion.

The motion was then put and adopted.

The Committee on credentials made their report as follows, and the Society took a recess until 2 o'clock P. M.

Report of the Committee on Credentials.

The following physicians were present: Drs. A. R. Wright, P. P. Wells, H. Minton, E. Hasbrouck, R. A. Adams, J. W. Dowling, A. K. Hills, H. M. Smith, John Butler, Catharine E. Goewey, W. S. Searle, E. D. Jones, H. L. Waldo, C. W. Boyce, N. R. Seeley, O. Groom, A. P. Cook, Anna C. Howland, W. B. Kenyon, F. Park Lewis, Mary C. Brown, Susan S. McKinney, Alice B. Campbell, Gertrude A. Goewey, W. B. Garside, Edwin Miner, Luzette E. Dunlevy, T. D. Koons, C. A. Walters, J. L. Talmage, Ward C. Pardee, J. A. Eaton, G. H. Parkhurst, J. L. Watson, H. Willis, Hugh M. Smith, E. D. Richardson, C. L. Bonnell, E. J. Whitney, D. L. Everett, M. F. Hein, Helene S. Lassen, J. Freeman Atwood, D. K. Mandeville, W. W. Blackman, W. Irving Thayer, Jose. J. Navarro, Samuel Talmage, O. T. Lines, F. E. Robinson, W. J. B. Capron, N. K. Bennett, S. T. Birdsall, H. W. Richter, O. Smith, E. Chapin, R. C. Moffat, James A. West, G. T. Borden, E. P. Hussey, Allen B. Carr, J. H. Demarest, B. G. Carleton, Edwin West, R. McMurray, J. E. Russell, Chas. Deady, Geo. S. Norton, Walter Y. Cowl, J. H. McDougall, S. A. Robinson, A. B. Southwick, N. B Covert, A. J. Frantz, Ella A. Jennings, J. W. Ostrom, J. T. Hotchkiss, C. A. Beldin, B. L. B. Baylies, F. W. Adriance, C. V. H. Morris, W. E. Morris, L. A. Clark, A. D. Kellogg, A. P. Williamson, H. Robinson, S. E. Calkins, H. C. Frost, E. H. Ashwin, Hariet Barkeloo, Georgia Cassidy, Emma Onderdonk, Augustus Von du Luhe, W. M. L. Fiske, S. E. Stiles, Hariet E. Brown, J. L. Moffat, W. H. McLenathen, Geo. C. Jeffery, C. T. Hamilton, A. M. Piersons, Martin DeSchere, Louis D. V. Wilder, H. I. Ostrom, D. Simmons, H. B. Kingham, S. D. Chase, Mary H. Everett, Edgar V. Moffat, R. H. Bedell, T. Franklin Smith, S. Lilienthal, Henry C. Houghton, E. P. Banning, J. W. Candee, John P. Ermentraut, H. C. Smith, John J. Mitchell, C. M. Lawrence. The following physicians were present from other States: Drs. J. J. Youlin, Jersey City N. J.; Chas. A. Church, Passaic, N. J.; C. B. Knerr, Philadelphia, Pa.; Edward Rushmore, Plainfield, N. J.; A. M. Cushing, Lynn, Mass.; G. H. Wilson, Meriden, Conn.

AFTERNOON SESSION.

The Society resumed at 2.30 P. M., and the reading of papers in the Bureau of Clinical Medicine was continued.

Dr. Waldo read a paper by O. Smith, M. D., on "Biliary Calculi, with Specimens," which was referred to the committee on publication without discussion. Dr. Waldo also announced that a paper by Dr. J. T. Greenleaf, on "Uric Acid Deposits" had been received. The author not being present, the paper was read by the Secretary.

Special Bureau of Physical Diagnosis.

Dr. Dowling, Chairman of the Bureau, said: So much has been written on the subject of medicine of late years that one would scarcely attempt to enter any room and address any body of medical men on the subject of

disease, but particularly do I feel that in this case, for I can look around and single out half a dozen who know more about the subject than I do myself. I simply ask those to remember that my paper was written, not for their benefit, but for the benefit of those who have not had the opportunity to examine the subject that they have. Dr. Dowling then proceeded to read his paper on "The Physical Signs of Approaching Dissolution in some Forms of Cardiac Disease, with the Causes of Sudden Death, and the Proper Precautionary Measures to be Used, when Organic Disease of the Heart is Known to Exist."

There being no remarks made on the paper, Dr. Walter Y. Cowl followed with a paper "On an Improved and Facile Method of Percussion."

Dr. Dowling: One thing I noticed in the doctor's remarks on the proper method of percussion, is that he spoke of the necessity of percussion against the skin. I think you will find that at least one half of the physicians who make examinations, either remove nothing at all from the body of the patient, or else will percuss over a linen shirt bosom. I contend it is utterly impossible to make a proper examination of the chest with any thing over it. We can not make a proper examination or bring a proper sound to the ear through the articles of clothing. It is my practice to teach, first through a suit of clothes, and then remove them one after the other until we get down to the naked skin, and the astonishment of the students is something remarkable, and with regard to using the fingers as a hammer and the fingers as a pleximeter, I much prefer the hammer of Dr. Flint. That hammer shown to us to-day is very similar to one recommended by Bennett. There is a great difference in hammers, but I prefer the hammer of Flint. You cannot get two alike; I have one in my possession now which I would not part with for any thing. With a rubber pleximeter I can determine much better than I can with my fingers. It depends upon how the man has been educated. If he has commenced by using the fingers of the left hand as a pleximeter and the fingers of the right hand as a hammer, he will become expert with it. If he uses a hammer and pleximeter he will become expert with them, but one great difficulty in a hospital practice, when I examine fifteen or twenty patients a day, my finger becomes sore and bruised from continued percussion, and on that account I much prefer the ordinary pleximeter and hammer of Dr. Flint.

Dr. Wilson, of Connecticut: If you will allow me for a moment I will say that I have produced an instrument for perfection of physical diagnosis which I think will be valuable. I had suggested to me the importance of some mode by which we could determine the muscular equilibrium of certain persons with weak or lax fibre, compared with those who are strong; those who have vigor as compared with those who have lost it, and also those who are paralyzed. The suggestion grew into the shape of a little simple wire instrument, that could be attached to the body of the individual, with a pencil which should describe the action of the body of the person. It could be held and attached so that it would work perfectly. I made the first and only one in existence. The brass wire, considerably stiff, is wound around the pencil, with a spiral spring to hold the pencil firmly to a wire along the base and side of the head. A weight pulled somewhat on the head, held by an elastic band, and this wire was sprung on to it.

The individual was asked to stand, feet together and hands pressed to the side and standing still, and the degree which he varied from perpendicular was described by the pencil on the paper. I don't know whether I have made myself clear, but it was suggested I should mention it.

Dr. Dowling: I thought the doctor would refer to the fact that muscular action imparts a sound. It is perhaps not generally known that a stethoscope placed to the ear and placed over the muscles of the hand, will carry a very marked sound when the muscles of the thumb are moved or contracted. It is supposed that part of the heart sound is caused by the contraction of the heart fibre. That is demonstrated by putting a stethoscope over the ball of the thumb and moving the muscle of the thumb. I thought the doctor was about to mention that.

The President: I would like to ask Dr. Dowling if he would not recommend physicians to follow there own instruments on hand, and not confuse the organs of the ear by having two or three.

Dr. Dowling: Yes, I mentioned that in my remarks I said some were accustomed to the use of the pleximeter and hammer, and others the fingers. It is very much better to use one thing.

Bureau of Obstetrics.

The Bureau was called, but no response was made.

Bureau ot Materia Medica.

A paper by Dr. George R. Stearns, of Buffalo was read on "Remedies Affecting the Organs of Circulation," and it was referred to the committee on publication.

Bureau of Ophthalmology.

Dr. Geo. S. Norton read a paper on "Some Affections of the Eye Dependent Upon Uterine Disturbances."

A paper by Dr. Wm. P. Fowler was red on "Hints for the General Practitioner on the Treatment of Injuries of the Eye."

The President: Are there any remarks to be made on this papor we have just heard?

Dr. Norton: There is one fact to which I will call attention in the treatment of severe deep injuries to the eye, affecting the cornea. It is the form of treatment I have used during the past two or three years in cases where previously I had never been able to save the eye. It is the use of ice on the eye ball, to keep out inflammation. If you see the injury within twenty-four hours after it occurred, and just as early as you can do so, have them put ice on the eye. I generally use it by cracking up the ice and putting it in a little bag, but if not convenient crack it up and put it in several pieces of linen cloth, keep it on constantly, and it will very often save eyes which cannot be saved any other way. That is if it is used early, but if it is not applied until forty-eight hours have elapsed, it will be of very little use. If there is any ulceration of the cornea it should be used at once. Don't let them have it on for a few minutes and then take it off for half an hour and then put it on again, but keep it on, and if that is done, it will be found of the greatest use in enabling physicians to save eyes.

Dr. Kellogg: In regard to the treatment of foreign substances like lime and potash in the eye. There was an objection made to using acids in the case of lime being introduced into the eye. I think I have seen better results in the case of lime or hot potash when it has gotten into the eye, by the use of strong vinegar than by any thing else. It will arrest the burning and will do no damage to the eye. That at least has been my experience.

Death of Dr. Constantine Hering.

Dr. Lilienthal said: I am sure the Society will pardon me for interrupting its proceedings at this time, for I have a matter to bring before it which it seems to me should receive attention to-day. We all know we have lately lost one whom we called Father Constantine Hering, of Philadelphia. I think it is one of the greatest losses homœopathy has sustained in this country, and I would move that the President appoint a committee to draft suitable resolutions in relation to the death of Dr. Hering, the father of homœopathy in this country.

The motion having been seconded was carried, and the President appointed as such committee Drs. P. P. Wells of Brooklyn and Samuel Lelienthal, of New York, with instructions to report at the session Wednesday.

Cphthalmology.

The report of the Bureau of Ophthalmology was again taken up, and a paper on "Color Blindness," by Dr. F. P. Lewis was read.

The President: You have heard read a paper of immense practical interest I think, and it seems to me the Homœopathic Medical Society of the State of New York, should take the initiative in this matter of official examination of railroad employes and pilots for color blindness. It seems to me of so much practical interest that we may lay aside the rules and take any action by resolution that we may think fit.

Dr. Groom: I move that this matter be referred to the Committee on Legislation.

A Member: I do not think it will be well to refer it to the Committee on Legislation. It would be better to appoint a special committee, as Dr Lewis recommended, to bring the matter before the Legislature of the State of New York. It is of great practical importance, and is gaining attention over the whole country. I do not suppose it will be proper for me to make a motion, but I will move as an amendment that the matter be referred to a special committee to be appointed by the chair to bring this subject of the official medical examination of rail road employes and pilots, for color blindness before the Legislature of the State of New York.

Dr. Jennings: I second the amendment.

Dr. Groom: If it is thought desirable I will accept the amendment, but if we have a Committee whose special duty it is to look after legislative affairs it will be proper to refer it to them for their consideration rather than to have a special committee appointed.

Dr. Lewis: I do not wish to speak particularly, on the amendment, but I might explain the course pursued in Massachusetts by Dr. Jeffrey, in his endeavors to bring the matter before the Massachusetts Legislature. The

thing seemed feasible, but I have not mentioned it. A special committee was appointed to bring it before the Legislature, and they appeared on a certain day before the special committee of the Massachusetts Legislature, and explained to them in full the necessity of having those occupying responsible positions, such as pilots or railroad employes, examined as to color blindness, and having some such action as that now proposed taken. The matter is still under consideration in Massachusetts. In Connecticut they have progressed still further and it is a working law. On the first day of October, every rail road employe in that state will have been tested in regard to his color senses. This matter has met with great opposition from the papers, and even some scientific journals have opposed it, from a misconception on their part of a proper way of making tests, but when fair tests are made, it must be evident that it is a great deal safer for people to trust their lives on railroads, than it has hitherto been.

Dr. Hasbrouck: It seems to me proper to put this matter in the hands of a committee of experts, and I support the amendment. I think the matter should be presented to the Legislature by experts.

Dr. Groom: I will withdraw my motion and support that for the appointment of a committee of experts, and I think the number should be three.

The motion as amended was adopted.

Dr. Wilson, of Connecticut: I do not care to speak on the question, but if you will allow me I will give you my idea of the working of the law in Connecticut. There is no question but Dr. Jeffrey's ideas were good, and a complete adoption of his rules would be safe beyond peradventure. But there is an objection to the extreme application of the rules as made in the practical application of them. The result is that very few of the railway employes can pass under his rule, while almost all rail road employes can distinguish any signal heretofore in use on the railroads of the state. And then comes up the practical question which every man employed and every employer is interested in, that is whether it is necessary to require of an employe, an ability greater than that necessary to the performance of the duty required; or in other words whether it is necessary that every physician should be an expert surgeon, an expert chemist, an expert physicist and colorist as well, or whether he should simply be able to see whether a part is inflamed by its color. A man should be able to distinguish every color, by Jeffrey's rule, and if that was carried out strictly, there is no limit to it. If you go to Persia, there is a young woman there who has distinguished 360 different shades of color. It was colored wool, and they were all mixed up together in one mass, and they were passed to her and she separated them as fast as she could count. No one in America could do it, and there must be a limit somewhere. The practical men think the examination is too severe, and there is a strong feeling against it, and the pressure from the rail road men is being brought to bear on the Board of Health to induce them to modify their rules. I simply draw attention to this because in the consideration of this matter by your committee it will be wise for them to bear it in mind.

Dr. Waldo: There is a subject that I have been requested to bring before the Society; it is that the editor of the Homœopathic Journal of Obstetrics and Diseases of Women and Children, desires permission to publish

such articles, read before the Society, as he may think best, and Dr. Minton offers a resolution that he be permitted to have the papers.

The President: It will require unanimous consent to have the matter considered at this time. What will you do with it?

A member: I second the resolution.

Dr. Jones: In that resolution there are two questions involved, one is whether the Society has any right to give to any publication or periodical, without the author's consent, papers that are presented to this Society. The theory is that they are simply for publication in its transactions, and I do not think the Society has any right to give away a paper that was presented to this Society, without the author's consent. Another question involved is, we shall be simply robbing the members of the Society of the benefit of papers, if we permit them to be published in periodicals instead of reserving them for publication in our own transactions. Here is an editor comes forward and says, under this resolution I want to examine your papers. Such papers as I wish to use the Society has given me the right to publish. The effect of that will be to destroy the value of the transactions, and I think the Society has no right to pass any such resolution.

A Member: I seconded the motion, simply to bring the matter before the house, I do not think we have any right to give our papers away.

Dr. Varona: I feel quite the contrary on the subject. If our papers are worth anything, the more publicity given to them the better. As to the right of the Society to pass such a resolution I have no question.

Dr. Kellogg: Inasmuch as we are not a secret society, and are not doing anything that we are ashamed of, any paper has a right to publish what it wishes and we should neither grant any privilege nor proscribe any one from doing so.

Dr. Groom: I understand this Society has undertaken the publication of the proceedings, by selecting such papers as will be of benefit to the Society and placing them in book form. The question for us to consider is, are editors in the habit of giving to other publishers their matter previous to publication? If so, well and good, if not, we had better do our own publishing first.

A Member: It seems to me that if we are going to allow Dr. Minton or others to publish these papers we do not need to publish any transactions.

Dr. Varona: Has not any paper a right to send a reporter here and take every thing down and publish it, and if so, shall we not extend to them the courtesy of letting them have the papers?

Dr. Minton: A very small number of persons have been enabled to hear these papers, which we suppose are valuable. Some have not been able to attend here, and, if they are of value to the profession, is it wise to lock them up for two years? We have passed a resolution to defer the publication until 1881. Will it be well and of advantage to the public to deprive physicians of any valuable information which may be contained in these papers until 1881, simply to enable the Society to publish them themselves?

The motion was adopted, Ayes, 17, Nays 11.

Bureau of Vital Statistics.

A paper entitled "Statistical Tables of Ward's Island Homœopathic Hospital for the year 1879," by A. P. Williamson, M. D., Chief of Staff, was presented.

Adjourned until Wednesday morning at 10 o'clock.

WEDNESDAY, SEPTEMBER 8, 1880.

The Society resumed its session on Wednesday Morning at 10 o'clock.

Bureau of Gynæcology.

Dr. Howland: Those of you that were present at the annual meeting held in February last, will remember that we had a paper presented opposing local treatment in uterine diseases. I have a short paper here from Dr. Doane, in regard to that matter which I will read.

After the reading of the paper, a paper entitled "Opposed to Vaginal Injections," by Dr. Alice B. Campbell was read.

The President: I presume there may be some difference of opinion in regard to the papers just read, certain it is that the two papers are in conflict, and we should be glad to hear any remarks or opinions or statements of experiences from any members present.

There was no debate.

A paper by Dr. Mary W. Noxon was read entitled "Absence of Menstruation Terminating in Addison's Disease," which was followed by a paper entitled "On the Respective Spheres of the Probe and the Finger in the Diagnosis of Flexion and of Malposition of the Uterus;" by Dr. Walter Y. Cowl, neither of which papers were discussed.

The Death of Dr. Hering.

Dr. P. P. Wells of Brooklyn, spoke as follows: Mr. President, before proceeding to read what I have written, it will be perhaps but just to myself to say that I was taken altogether by surprise last evening on receiving notice that I had been appointed to prepare resolutions commemorative of the death of our colleague Dr. Hering. The time given in which to arrange my thoughts appropriate to so vast a subject and put them on paper, was so brief that it was exceedingly embarrassing. The interest I have in the memory of that great man, and the many years of intimacy I have had with him, forbade my declining to attempt as best I could to present to you this morning the brief resolutions I now read.

"In Oschatz, in Saxony, on January 1, 1800, it pleased the Almighty God to give a great blessing to the world of science, and to the world of suffering, in the birth of an infant, who afterwards became known to us as the man, Constantine Hering. It pleased the same Almighty Goodness to remove him from us by death on the 23d, day of July, 1880. In view of the life and its labors which filled the space between these points of time we,

Resolve, 1st. Gratitude to Him who gave so long life and so great powers for good to our friend and brother, and that for so many years he gave it to us to receive inspiration from his great knowledge and generous spirit, so he becoming to us our leader and teacher, our father and friend, our light in

the art of healing we profess, and our example in his never failing devotion to the cause and interests of truth in all the time and circumstances through which he passed.

2d. Gratitude to the memory of him by whose labors we have been so greatly enriched.

3d. That in Hering, the philosopher, we remember his vast extent of knowledge, his vigorous pursuit and grasp of facts, his ready appropriation of these, and his facile tracing of the relationship of new facts to old, and their sure reference to their proper place in the circle of facts known.

4th. That in him as a teacher we remember his clear perception of facts, and of just those his pupil needed first to know, and his skill in imparting those in the manner and sequence best adapted to meet these needs, and his heart-felt gladness in giving from his fullness to the wants of all who would learn. That he never was weary of adding to the knowledge of others from the vast treasures he had gathered in his long life of unexampled activity.

5th. As a physician, we remember his loyalty to his convictions of truth, and to the law of healing he had accepted from the great master; his clear perception of the facts of disease and of the specification of the agencies he employed for its cure, and his never failing or faltering endeavors to add to the number of these, and that from these endeavors to add to these have come to us a knowledge of many of our most precious remedies.

6th. As an author, we remember the great number and excellence of the productions, of his pen, each being in clear characters the impress of the individuality and genius of the writer, the whole making a series of unexampled extent, interest and value. We remember these as abounding in compact thought; with facts contributed to our knowledge, with suggestions of relationships of those to other facts and to each other; all so luminous with the effulgence of genius, and so astonishing by reason of the great labors they disclose. We remember that it is to these labors the literature of homœopathy is indebted for more than half its wealth.

7th. As a man, we rememher him as largely endowed by nature with the noblest qualities. Frank, generous, affectionate, true, noble in his aspirations, loving the good, and hating all that was mean, he has left to us a memory to which we can always recur with pleasure and profit. As an embodiment of great knowledge and learning, by his death he impresses us with a sense of our great loss, and we are constrained to feel and say we shall never look on his like again."

Dr. Lilienthal: Will you allow me, in seconding these resolutions to say a few words about our departed friend. One thing which endeared him to all those who were acquainted with him was the great encouragement he always held out to the young. There was no difference in him, no matter who it was. Any one who came to him poor went away rich. Another thing which I always admired so much in Constantine Hering, was you never heard him say, homœopathy will go down, he knew as one of the founders of homœopathy, that the legacy was left in good hands, and I am pretty sure our young men will take pride in following such a good example as Constantine Hering has left them. I remember on one occasion he said, I am not afraid of homœopathy, we shall mix with other schools, and I am pretty sure other schools will come to us. We will be one school,

but they will come to us; his memory should be sacred to us; he died in harness; at four o'clock on the afternoon of his death he wrote his last prescription; it was for a poor German man; he was broken down in health and had been treated by the old school without any benefit; he examined him, and expressed a doubt whether he could be made a whole man again, but he said he must relieve him, so he gave him a prescription. That was another beauty of his character; he knew the resources of the materia medica were so great that even when others despaired he was happy. I hope the resolutions as prepared by Dr. Wells, another member of the school, will be accepted unanimously.

The resolutions were carried by a rising vote.

Bureau of Gynæcology.

The report of this Bureau was again taken up and Dr. Cowl read his paper on "Tight Lacing as a Cause of Disease."

The President: You have heard the paper; are there any remarks to be made upon it. No doubt nearly all of you agree with the position taken in the paper, and some may have remarks to make upon the subject and on cases they have seen. I hope to hear some remarks and some discussion of the views taken on the use and abuse of local treatment in various diseases. There is such a difference of opinion prevailing among physicians as to the use and non-use of local treatment that I had hoped to hear the matter discussed. While we may disapprove of the too frequent use of local treatment, still I think it is of use in some cases, and we shall find some cases which are not remediable without local application. There being no further remarks, the Bureau was closed.

Bureau of Otology.

The first paper read in this Bureau was "Two Cases of Otitis Media Purulenta, resulting from the use of Nasal Douche," by W. P. Fowler, M. D.

The President: Are there any remarks on this paper, which is certainly a very practical one.

Dr. Whitney: I have listened to the reading of this paper with a great deal of interest, because it touches on a subject with which I have had considerable to do. There is no doubt but that such cases as that which has been referred to in Dr. Fowler's paper have given rise to considerable alarm on the part of the profession. I think that any body who is familiar with the treatment of catarrh will admit that the nasal douche is a valuable adjunct in the treatment of that disease. Cleanliness in the treatment of catarrh is one of the essential points, and I know of no other means of so thoroughly and expeditiously cleaning out the nasal passages as by the nasal douche. That being an admitted fact, the next point is how shall this douche be used, so as not to give rise to inflammation of the middle ear? I have used the nasal douche in hundreds of instances and have never had a case of otitis. I have used it in seven or eight years of dispensary and private practice, and have insisted on my patients using it. I think the whole trouble arises from ignorance in its use, and if it will be of any advantage I will here state the means which I have adopted in my practice, and the precautions which I have used in all cases where I have had

occasion to use the nasal douche. In the first place, the first error that is made, and one that is almost universal, is in placing the nasal douche at a fixed elevation either upon a mantle-piece or on a shelf. The result is to give an enormous pressure in the nasal passages. If properly applied the water passes through the nasal cavity slowly, sometimes only drop by drop, one can readily see that by placing the douche at a high elevation, the water being forced up into the nostrils must go somewhere, and if the pressure is great it is forced into the middle ear, and inflamation sets in. The next error in using it is to allow the water to run through the nose in a continuous stream. The usual course is to run half the contents through one nostril and the remaining half through the other. The water remains there for a long time after, which any one can prove by snuffing up water. The means I have adopted is as follows, I direct the patient always to hold the douche in his hand, and only raise it sufficiently high above his head to ensure a passage from one nostril to the other. That is all that is needed. In the second place, I never allow him to run a continuous stream of water through one nostril into the other, but I let it come in consecutive charges. That will prevent it from coming too fast and acts the same as the nasal syringe. I imitate the action of a nasal syringe as closely as possible with the nasal douche, and never allow my patient to run a stream for a longer time than he can count ten, when he is instructed to withdraw it and put the tube into the other nostril and so on. After the douche has been used in this way I tell him to resort to the blowing of the nose. The proper and generally accepted way of blowing the nose is to use a handkerchief, but that is not the way to blow the nose after using the douche. We raise both hands and take a full inflation and then let go, and it forces its way through. My practice is never to allow patients to use a handkerchief. I allow them to close one nostril and blow it out on either side, or take a deep inspiration and blow it out of both nostrils, but I never allow them to take a deep inspiration and blow it out by exploding force. I hold that if this method was adopted no trouble would result from the use of the douche. I do not speak from a theoretical standpoint, because I have used it in hundreds of instances, and I don't know that I ever had an unsuccessful case. Dr. Fowler has mentioned also the use of the post nasal syringe. I admit it is better, but people cannot use it, it must be used systematically and people can not use it, and they will object to employing a practitioner and paying from three to five dollars every morning to have their noses washed out when they can do the same thing with a teaspoonful of salt at home.

A Member: I desire to say one word in reference to Dr. Fowler's paper. Why use the nasal douche at all? Is it pertinent or proper? I range myself with those who hold similar views of practice to those held by the author of the paper on the treatment of uterine difficulties with injections. There is so much that may be said on this matter that it is of little use to attempt to say it now. I believe that it is the history of cases, that the use of any method of douching or injecting does not give the results that are in the long run looked for by those who favor it. Dr. Whitney remarked that in his experience he never had a case, and never has seen a case of trouble resulting from the use of the douche. That reminds me of a remark very similar to that which was made by a physician to Dr. Rosa, to which Dr.

Rosa replied that very likely his informant spoke the truth, for that after being subjected to treatment in this way, the patients did not go to him again but went to some other physician. I remember a remark being made by an eminent physician with regard to the use of injections, which was to the effect that if the Almighty had desired that a stream of water should be passing frequently or daily through this part of a woman he would have arranged matters so that it could have been done with less inconvenience to the patients. I believe we have in following out our physiological instructions a far better way than using either a douche or an injection, and that is by inhalation, and those who have adopted this method find themselves much better pleased with the results.

Dr. Searle: You might just as well say that if the Almighty had intended that there should be a bridge over the east river, he would have put one there. That is about as good an argument as to say that if the Almighty had designed that a stream of water should go through the internal organs he would have arranged it so. I have had the same experience as Dr. Whitney in the use of the nasal douche in the treatment of catarrh. The great frequency with which deafness is caused in this manner by the actual treatment of catarrh, has lead me to very carefully watch the treatment and the result of treatment of this disease, and I have found it almost impossible to get patients to come frequently enough to have their passages washed out and cleared by the post nasal syringe, and I can confirm Dr. Whitney's experiences and say that in eleven years I have never seen any evil results from the proper use of the nasal douche, nor do I believe any such cases can arise where my directions are followed out. As to the comparative value of inhalation and the use of the nasal douche, I do not think that there is any comparison between them. There are secretions there that consist of pus and sometimes of scabby formations. I would ask how it is possible that inhalation should reach the diseased surfaces. What is the use of using the post nasal syringe unless it is that medicated injections can reach the surfaces. I don't think it is possible for them to have anything but a homœopathic effect on nasal catarrh, but for the purpose of cleansing the parts every day or sometimes twice a day the douche should be used. When your patents come, you make the application with a post nasal syringe and you not only find the passages clean, but if you use a few syringes full it will meet the necessities of the case and save time and money to the patients.

Dr. Houghton: I desire to say this, that if a physician is desirous of prompt improvement and tangible effects, regardless of constitutional or remote results to the patients, he will use those means that give that result, and so the profession will defeat itself and laymen defeat themselves; but if they want to have *permanent* results, the best conditions for the patients, not only for to-day, this week, this month, but all the future of life, it seems to me a careful selection of constitutional remedies as well as local ones and their application by proper means, may not be so prompt in their results, but the benefit is more lasting in the future. Therefore I give the preference to inhalation.

Dr. H. C. Houghton then read his paper "On the Use and Misuse of the Ear Syringe."

Dr. Searle: The paper and the conclusion at which it arrives has my most hearty sympathy. I wish simply to say that in removing wax from the ear it is almost invariably my practice never to use a syringe until they have put the ear to soak. I have patients put their arms upon the table, the head upon the arm, having the ear filled with warm water, and I have them remain in that position for half an hour. Then, if the syringe is used after that is done very thoroughly, it will bring out the cerumen in a stream with very little difficulty. If the ear is filled up higher the soaking process is again restored to, and in that way a great deal of difficulty is avoided with greater comfort to the patient.

The President: Don't you sometimes find it necessary to put it to soak longer than that with Glycerine?

Dr. Searle: My experience has been that one soaking of half an hour will soften the wax to a considerable extent and generally one soaking is sufficient. I would invariably advise against the use of Glycerine in the ear. I think all aurists will agree with me when I say I do not think it should be used except for its medicinal effects. It is well known that Glycerine has a great affinity for water, and will take it from the tissues. It is used for uterine difficulties and enlargements. It will congest the parts very much, and in case there is any inflamation any where it will increase it, and increase it to a very dangerous extent. I advise others never to use it.

Dr. Houghton: I agree entirely with Dr. Searle with reference to the use of Glycerine. It is a question discussed in the later books very fully, and the question arises in the mind of the practitioner what can we substitute for Glycerine. In the purified Petroleum, under the name of Vaseline, we have an article with which in my experience, and I have used it to a certain extent ever since it was introduced, I have been delighted with the results obtained. What is true of Glycerine is exactly the opposite of the Petroleum oil. It has no affinity for water nor will it combine with alcohol except by emulsion. You will find it an admirable substitute for Glycerine.

The President: I am glad to have had that brought out, because it has proved in the hands of some practitioners to be a great advantage.

Committee on Color Blindness.

The President announced as the committee to whom was referred the matter of the examination of railroad employes in regard to color blindness, and to call the attention of the Legislature to the subject, Drs. F. Park Lewis, George S. Norton, W. S. Searle, T. F. Allen and E. D. Jones.

Bureau of Surgery.

Dr. Varona said he had just received a note from Dr. Terry, chairman, stating that he had met with an accident and sprained his ankle while traveling to the meeting of the Society and had to return home.

The following papers were read, and referred to the committee on publication without discussion:

"On the Relation Between the Anal Sphincters and Diseases of the Anus," by Dr. H. I. Ostrom.

On "Conservative Surgery," by Dr. Varona.

On "Hypertrophy of the Prostate," by Dr. Thomas D. Spencer.

The President announced that the following telegram had been received, which he read:

EASTON, Pa., Sept. 8, 1880.

To the Homœopathic Medical Society of the State of New York, in session at the City Hall, Brooklyn.

The Homœopathic Medical Society of Pennsylvania, in session at Easton, send greetings to the members of the New York State Society in session at Brooklyn.

R. E. CARUTHERS, M. D.
Corresponding Secretary.

The World's Convention.

The President said he had received a communication from the committee of arrangements of the world's convention to be held in London next June. It contains a formal invitation to the Society to take part in the convention.

The Secretary was empowered to prepare such a report from this Society as might be thought desirable.

The President announced that he observed Dr. Dowling, President of the American Institute of Homœopathy was present, and he invited him to take a seat on the platform.

Dr. Dowling: I look upon the New York State Homœopathic Medical Society as being the second Homœopathic Society in importance in the world, and I value my membership in it greatly, and get quite as much pleasure sitting with my fellows and friends on the floor as I should if seated with you sir, on the. Oplatformf course it is needless for me to say that I fully appreciate the proud position to which I have been elected. The time and place fixed for the next meeting of the American Institute was left with the executive committee with power. It was the wish of the members present that it should hold its next meeting in or near New York City. It is very desirable we should if possible assemble in one building where we can hold our meetings and eat together and sleep together, and if we like, smoke together, if our lady friend of yesterday does not object. I has been about decided that the meeting shall be held either at Brighton or Manhattan Beach. We find we can have a large room to assemble in, and smaller room for sectional meetings, and all who choose to come can be accommodated in either of those buildings. Those who have attended the meetings know how much better it is to be together than in different hotels. Another object in leaving it to the executive committee was, because the International Congress is to be held in London, and it was thought that those who attended our meetings could start immediately, on their termination, to London, if they chose to go. I have had some communications from Dr. Hughes, and he says he thinks he has been able to arrange it so that the International Congress will be held from July 4th, to July 9th, in London, and that will give us a chance to hold our meeting at the usual time in June. As in or near New York, is the most convenient for the majority of our members, I trust all of you will make it a point to attend the meeting, and I can assure you a pretty strong effort will be made to have it a good and enterprising one. Those of you who are not members I can refer to our friend Dr. Kellogg, who will receive your money, and enter your names as members.

The Secretary announced that no reports had been received from the following Bureaus, Climatology, Histology, Medical Education and Vaccination.

The President called the attention of the Society to the law passed last winter relative to the registration of physicians.

There being no other business before the Society, Dr. Hasbrouck moved a vote of thanks to the Mayor and common council of the city of Brooklyn, for their courtesy in permitting the Society to hold its meeting in the council chamber.

The motion having been seconded, it was adopted.

Dr. Dowling, moved a vote of thanks to the President for the able and impartial manner in which he had presided over the deliberations of the Society.

The motion was adopted, and the President briefly acknowledged the same.

Dr. Dowling moved a vote of thanks to the physicians of Kings County for the hospitable manner in which they had entertained the members of the State Society, The motion was adopted, and the Society adjourned *sine die.*

Immediately after adjournment, the physicians and their wives and friends became the guests of the homœopathic physicians of Kings County and were conveyed by railroad to Hotel Brighton, Coney Island, where an elaborate dinner was served at six o'clock. After spending two hours at the table, in strict attention to the varied and elegant bill of fare, the assembly was entertained by the reading of a poem entitled "*Similia Similibus Curantur,*" by Dr. Henry Minton. The poem was loudly applauded.

Thus closed one of the most successful meetings ever held by the Society.

H. L. WALDO,
Recording Secretary.

IV.

Proceedings of the Thirtieth Annual Meeting Held in Albany February, 8th and 9th, 1881.

The thirtieth annual meeting was held in the Common Council Chamber, Albany, Tuesday, February 8th, 1881, Dr. A. R. Wright, President in the chair.

The proceedings were opened with prayer by Rev. J. W. Alderman, D. D.

The President then spoke as follows: It is with pleasure that I announce that the annual session of the New York State Homœopathic Medical Society, is now opened for business. It is with pleasure that we meet socially and for our professional work, and I hope that our session may

be harmonious and serviceable to the profession. Your Chairman is no expert as a parliamentarian, and if in the course of the meeting he shall make mistakes he hopes you will be lenient, and that the exercises may pass harmoniously. According to the usages of the Society it is made the duty of the President to suggest any thing in regard to business for the session, but there is little, if anything to suggest. It has occurred to me that one or two points might be mentioned, and I will speak first of the matter of delegates to other State Societies. I presume the Secretary has not had communication with the Chairmen or members of these delegations and if those who are present will look over the list and see upon what Bureaus and delegations they are placed, so as to be ready to report when called upon, they will oblige us. A subject is to come up, I believe, that is of general interest, and which is under good head-way, under direction of the committee appointed at the semi-annual session, to present the subject of tests for color blindness to the legislature. That will be attended to by the proper committee I presume. There is one other point of great interest to the medical profession, allopathic as well as homœopathic, namely that this Society, in connection with others, use all possible means to have the law repealed in this State by which medical colleges can be so easily established. Many of us know there have been one or two established that do not reflect any credit to the profession in this State, and it would seem necessary that a law should be passed which would prevent these colleges from multiplying upon us. We think good colleges are an advantage, but those colleges to which I refer are a disgrace to any profession. But I will not discuss the matter now. In connection with this matter the subject of a State Board of Examiners for examining the future graduates of medical colleges, and ascertaining their qualifications for the practice of medicine, will also come up. That subject has been agitated throughout the State, and I think it will be highly proper for us to take some action in regard to it. Whether we would favor the appointment of a State Board of Examiners, for the purpose of examining all persons before they begin to practice medicine, is a question for you to pass upon. It is a subject of great importance and the action we shall take on it I leave to you to determine. I would speak of a matter here that has caused some little difficulty and led to some little misunderstanding, and that is the difficulty of appointing members of the different Bureaus. It is put upon the executive board to fill out the Bureaus after the chairmen have been appointed. It has been the custom of the President to correspond with the different chairmen to find who they would like in their respective Bureaus. On the appointments of the Bureaus I endeavored to follow their wishes as nearly as possible, but under that system some misunderstandings will occur. If you could devise means by which the Bureaus could be appointed, and have men on them who would signify their intention of serving, it would be desirable, but you all see the difficulty of getting answers from fifty to a hundred gentlemen in time to print the annual announcement of Bureaus. It is impossible for the President to do anything else than to ascertain from the chairman of each Bureau who he would like to have serve on the Bureau. It is impossible to correspond with the men and women and get answers from them, as it will take from three to six months to do it. I have waited three months to get an answer

from a physician to know whether he would serve or not. If there has been any misunderstanding, I hope you will think the President has done the best he could under the circumstances. It is a difficult matter and I mentioned it to show you that we endeavored to do the best we could. The next business in order, I presume, is the appointment of committees. I will appoint the following:

Auditing Committee—Drs. E. D. Jones, H. Swits and A. P. Hollett.

Credentials—Drs. J. J. Mitchell and H. M. Paine.

Invitations—Dr. S. H. Talcott.

The next business in order is the reading of the minutes of the last annual and semi-annual meetings.

The Secretary commenced reading the minutes, when Dr. W. H. Barnes of Chatham, said the proceedings of those two meetings were familiar to most persons present, and he moved that the further reading of the minutes be dispensed with, and the Society proceed to business of more importance.

The motion was seconded and adopted.

The President: I see we have with us the President of the American Institute of Homœopathy, and I will invite him to a place on the stage that we may all see him. We shall be glad to hear from Dr. Dowling, any communication he may desire to make from the American Institute.

Dr. Dowling: I have nothing special to say in reference to the American Institute. You have probably all seen by the journals that the time and place of the next meeting has been fixed, and every member of the Institute trusts that every one who is not connected with the organization will join it. We expect next summer to have a very animated meeting, and in addition to that I can guarantee every one who sees fit to come to Brighton Beach, a very pleasant time.

Dr. Hasbrouck: May I ask Dr. Dowling to state definitely the time of the meeting. I have seen one announcement for the 11th, and another for the 14th of June.

Dr. Dowling: The meeting will be held from the 14th to the 18th of June, at the Brighton Beach Hotel. Nearly all present are familiar with the location. It is but a short distance from New York city. The hotel is a large one and Mr. Breslin, the proprietor, has promised to do his best to make every one enjoy himself. There will be a new feature introduced, as we will have sectional meetings. Really four rooms will be occupied by the association, one room for the accommodation of all for general meetings, during the morning sessions, and then three other rooms where the different Bureaus such as surgery, pathology and gynæcology will meet. Those particularly interested in surgery and pathology, may devote their time to those subjects to the exclusion of others, if they so desire. Heretofore we have been obliged to devote our time to matters of no special interest perhaps to us, which becomes tedious to some although interesting to others. It is suggested that there will be a banquet given to the members, and we hope to have a very pleasant excursion on the bay, and visit some of the institutions in New York and particularly the Homœopathic Hospital on Ward's Island. I think the four days will be very pleasantly spent. The view from Brighton Beach is unsurpassed as an ocean view,

and there will be the usual band in daily attendance, and I hope all will make an effort to be present and come with interesting material for the benefit of all the members of the Society.

The President: We have a communication from the oldest member of the Society and one in whom we are interested and who is interested in us, Dr. John F. Grey, which Dr. Waldo will read.

Dr. Waldo read the communication as follows:

DEAR DR. WRIGHT: I am very weak from loss of blood, hæmaturia. I enclose the form of a bill as my report from committee on Medical Education. I will write the memorial to the Legislature, setting forth the reasons in favor of our projected reformation, which are very cogent and apparent. I thank you for writing me, and beg leave to retain your favorable estimate of, dear sir,

Yours Faithfully
JOHN F. GRAY,
Fifth Avenue Hotel, Feb. 6th, 1881.

A. R. WRIGHT, M. D., Pres. Hom. Med. Soc. State of New York.

Text of the Bill Prepared by Dr. Gray.

An act to secure a uniform standard of license for the practice of medicine in the State of New York.

SEC. 1. The Regents of the University of this State shall provide for and issue all licenses to practice medicine from and after the passage of this act.

SEC. 2. The Regents shall appoint one or more Boards of Examiners in medicine, which shall consist of not less than nine legally authorized physicians to each board.

SEC. 3. No form of medical license granted after the passage of this act shall be valid in this State except the one provided for in Section 1st of this act.

SEC. 4. The applicant for the aforesaid license shall pay for the same to sum of $25 into the Treasury of the University, on receiving the diploma therefor.

Memorial.

Effects of the proposed law:

1. It would make private teaching, *ceteris paribus*, quite equal to college instruction, a fair and untrammeled competative system of preparing candidates for the trial of their merits.

2. It would place it in the power of the Regents *to protect the people of the State from ignorant physicians, Surgeons and gynaecologists.*

3. It provides for correcting the blundering diplomas of all colleges in this and all other States, the world over by a standard rising in severity up to the latest discoveries in the healing art.

The President: There is another communication from the Central New York Homœopathic Society, relative to Dr. William C. Doane, which the Secretary will read.

The Secretary read the communication.

The President: Will you take any action on the communication at present, as this is the proper time to do so.

It was moved and seconded that the communication be laid on the table

for the present, and a committee appointed to report what action the Society should take in the premises. The motion was adopted.

The Secretary read several communications from physicians announcing their inability to be present, and also one from Dr. Roth, of England, relative to the night medical service in large cities, and to the credit of introducing it being given to a physician who was not entitled to it.

The President: The Chairman is reminded that he has neglected to name the committee on the President's address. He will name Drs. F. P. Lewis and J. Savage Delavan as that committee.

The Treasurer, Edward S. Coburn, M. D., then read his annual report, as follows:

TROY, N. Y., Feb. 8, 1881.

Edward S. Coburn, Treasurer in account with the Homœopathic Medical Society of the State of New York.

DR.

To Balance in Treasury	$ 55 08
" Cash from Members	365 00
" Cash for County Societies	235 00
" Cash from Certificates of Membership	18 00
" Cash from sale of Books	42 00
Total	$ 715 08

CR.

By Cash paid as per Vouchers	$ 527 10
Balance in Treasury	187 98

Dr. Hasbrouck moved the report be accepted. [Adopted.]

The report of the Corresponding Secretary was then read as follows:

Mr. President and Members of the Society.—I would most respectfully report, that during the year, as your Corresponding Secretary, I have endeavored to attend to the correspondence of the Society, so far as it came under my supervision. Early in the year, as soon as furnished with the appointments by the President, I wrote the delegates to the several medical societies and associations to which they were accredited, notifying them of their appointment and urging upon them the importance of attending the meetings. As has been stated in previous reports, I found a lack of interest in this direction. Comparatively few, so far as I can ascertain, were in attendance at the meetings of the societies or associations to which they were accredited delegates. Those that were thus in attendance may be able to report during the present session of this Society. I have received no reports from them, nor from the societies, therefore I will be unable to make any further report in this matter. In corresponding with the officers of sister societies they expressed their good will for our Society, and a desire for further fraternal relations with us, which was reciprocated on my part, in behalf of our Society. From several of the societies and associations I have received credentials of delegates with assurances that they will be present at this meeting and I hope we may have the pleasure of making their acquaintance at this time. I have had some correspondence with physicians in Allegany County in regard to the organization of a County Society, but have not learned as yet, whether such organiza-

tion was perfected. This is in substance, the correspondence of my office. I have no communications of special importance to lay before the Society. All of which is respectfully submitted. A. P. HOLLETT,
Corresponding Secretary.

Report of the Delegation to the Massachusetts Homœopathic Medical Society.

The undersigned respectfully reports: That, as a delegate from the Homœopathic Medical Society of the State of New York, he attended the Fortieth Annual Session of the Massachusetts Homœopathic Medical Society, held in Boston, April 14th, 1880.

There was a large attendance of members, and much interest manifested in the proceedings, which occupied one day.

Your representative was cordially received, invited to address the meeting, and requested to convey to the New York Society, the assurance of the continued fraternal regard of the Massachusetts Society.

The annual address was delivered by the President, T. S. Scales, M. D. Interesting papers were presented on "Climate as an Element of the Materia Medica," by E. W. Jones, M. D., Taunton; on "Pædology," by Drs. J. Hedenburg of Medford, and R. E. Jameson of Jamaica Plain; on "Surgery," by Drs. H. M. Jernegan, G. H. Payne, G. H. Percy of Boston, and J. H. Carmichæl of Worcester; on "Clinical Medicine," by Drs. J. H. Sherman of Boston, E. B. Holt of Brooklyn, W. H. Longee of Lawrence, L. A. Philips of Boston; on "Gynæcology," by Drs. W. H. Longee of Lawrence, H. K. Bennett of Fitchburg, and L. A. Philips of Boston; on "Obstetrics," by Drs. M. V. B. Moore of Marblehead, and C. A. Moers of Lawrence.

The following were elected officers for the ensuing year:

W. H. Longee, M. D., Lawrence, President; W. Wesselhœft, M. D., Cambridge, and J. W. Hayward, M. D., Taunton, Vice-Presidents; H. A. Chase, M. D., Cambridgeport, Recording Secretary; R. E. Jameson, M. D., Jamaica Plain, Corresponding Secretary.

The Society has issued its fifth volume of transactions, an octavo of four hundred and forty pages, for the year 1878–79.

HENRY M. SMITH.

NEW YORK, FEB. 7, 1881.

Dr. Mitchell, from the Committee on Credentials, reported that there were about fifty-six members of the Society present, and quite a number of visitors.

Dr. Hasbrouck: It is pleasant to know who are present. May I ask Dr. Mitchell to read the names of those present?

The Secretary read the list of those present, as follows:

Drs. H. M. Paine, E. D. Jones, J. Savage Delavan, L. M. Pratt, Geo. A. Cox, S. H. Carroll, W. H. Randel, Catharine E. Goewey, Wm. H. Van Derzee, W. E. Milbank, C. E. Jones, Mrs. M. A. G. Pomeroy, N. Hunting, of Albany; J. N. Bradley, Adams Station; G. H. Billings, Cohoes; Titus L. Brown, Binghamton; Harmon Swits, Schenectady; H. L. Waldo, West Troy; W. H. Barnes, Chatham; C. P. Cook, Hudson; P. W. Mull, Ghent; Robert Boocock, Coxsackie; Anna C. Howland, Poughkeepsie; A. R. Wright, F. Park Lewis, of Buffalo; E. Hasbrouck, Alice B. Campbell, Gertrude A. Goewey, of Brooklyn; H. P. Partridge,

of Bennington, Vt.; H. M. Dayfoot, of Mt. Morris; G. L. Gifford, Hamilton; G. W. Peer, E. H. Hurd, Charles Sumner, Rochester; Wm. Zoller, Fort Plain; Lewis Faust, Schenectady; J. H. Demarest, Alfred K. Hills, Chas. A. Bacon, J. W. Dowling, New York; C. D. Hale, Syracuse; A. J. Frantz, Geneva; S. H. Talcott, C. Spencer Kinney, Middletown; J. J. Mitchell, Newburg; C. A. Belden, Jamaica; E. S. Coburn, R. E. Belding, Miss. M. L. Dowdell, Troy; A. P. Hollett, Havana; B. F. Williamson, Prattsburg; E. J. Morgan, Jr., Ithaca; D. Springsteed, Saugerties; L. A. Clark, Cambridge; P. H. Mason, Peekskill; J. R. Secor, Sing Sing; Miss Sara Mc Entee, Rondout; S. E. Caulkins, Athens.

The next order of business was nomination of officers for the ensuing year. The following nominations were made:

President—Drs. S. H. Talcott, E. Hasbrouck, A. K. Hills, S. P. Burdick.

First Vice-President—Drs. J. J. Mitchell, C. Sumner and L. B. Wells.

Second Vice-President—Drs. C. D. Hale, A. J. Frantz and W. H. Barnes.

Third Vice-President—Drs. G. W. Little, G. W. Peer, J. H. Demarest and C. L. Bonnell.

Recording Secretary—Drs. H. L. Waldo and A. P. Hollett.

Corresponding Secretary—Drs. A. P. Hollett, F. W. Adriance and H. M. Dayfoot.

Treasurer—Dr. E. S. Coburn.

Delegates to Other Societies—On motion of Dr. H. M. Paine, it was referred to the President to make out a list after the adjournment of the Society.

The President: It will now be in order to nominate Censors for the different districts. The State law requires that we should have the Censors appointed, although their duties are very light indeed.

Dr. H. M. Paine: I do not think the State law requires it, but it is left with the Society to govern it. As at present organized the Censors have no function to preform. I propose to offer a resolution, at the proper time, looking toward a change in the membership of the Society, so that any physician, allopathic or homœopathic, can become a permanent member of the Society at once.

The President: Would that supersede the necessity of Censors?

Dr. Paine: No; then the Board of Censors would have to determine as to the qualification of applicants.

The President: At present we are supposed to act upon the nominations by County Societies of all persons for permanent membership, and to know what portion of the district is entitled to the next permanent member.

Dr. Paine: I move that the selection of Censors for the coming year be referred to a committee, with instructions to report to-morrow morning.

The President: I do not see anything irregular in that. It is in effect asking a committee to nominate the Censors, instead of the Society nominating them as at present.

The motion was put and adopted, and Doctors Paine, Sumner and Mitchell were appointed the committee.

The President: The next business in order is the nomination of honorary members. The following nominations were made. Dr. R. E. Caruthers, of Alleghany City; Dr. Hayward of Liverpool, England; Dr. J. Gibbs Blake, of England; Dr. Samuel Jones, of Ann Arbor, Mich.; Dr. George Peck, of Providence, R. I.; Dr. O. S. Runnels, of Indianapolis.

The President: The next business in order is the election of permanent members.

Upon motion the Corresponding Secretary was empowered to cast the ballot of the Society, and the following were declared elected: Wm. Hanford White, M. D., Joseph Finch, M. D., Wm. M. Butler, M. D., Jacob S. Phillips, M. D., J. J. Peckham, M. D., Isaac Miller, M. D., E. W. Bryan, M. D., B. F. Williamson, M. D., H. M. Dayfoot, M. D., A. B. Rice, M. D., F. Park Lewis, M. D.

The President: The next business in order is the election of honorary members.

Upon motion, the Corresponding Secretary was empowered to cast the ballot of the Society, for the nominees, and the following were declared elected: J. P. Dake, M. D.; W. L. Breyfogle, M. D.; Samuel Potter, M. D.; F. D. Durkee, M. D.; John C. Budlong, M. D.; J. H. Gallinger, M. D.

The President: The next business in order is the nomination for regent's degree. The Society is entitled to nominate four persons and they must be over forty-five years of age.

The following were nominated. Drs. Charles T. Harris, of Syracuse; E. H. Hurd, of Rochester, H. M. Paine of Albany, and C. E. Goewey, of Albany.

The President: The next business in order is the report of the committee upon the regularity of the election of Dr. R. B. Squires, to permanent membership in the State Society.

Dr. Waldo: Through an oversight the committee was never appointed to consider the question, so I wrote to the Secretary of the Onondaga County Society and received from him a statement to the effect that Dr. Squires was regularly nominated by that Society. You may remember the question was whether he had been recommended by this County Society, and a certain physician said he had not. The Secretary of the Society certifies that he was so recommended and hence I suppose he was regularly elected. Dr. Squires is dead now, and this will leave his name on the minutes of the Society as one of its deceased permanent members.

The President: It was the object of the appointment of the committee to investigate the matter, in order to leave his name among the deceased permanent members.

The next business in order, is the selection of a place for holding the next semi-annual meeting.

Dr. Coburn: I move that the subject be laid over until a later hour, in order to give time to hear from the members of the southern tier. The motion was adopted.

The President: The next business in order is the proposed change of article six of the constitution, notice of which was given by Dr. E. S. Coburn, proposing to change the time of the annual meeting to the first Tuesday in March.

Dr. Coburn: One of the purposes of holding the annual meeting at this time is in order to have access to the Legislature, and so far as certain business is concerned, perhaps it is better to hold it at this season of the year than later. Still our Legislature seldom adjourns until April or May, and I offered this resolution to change the time of meeting in order to enable members who are engaged in our colleges to attend our meetings. I think if you ask Dr. Dowling he will tell you it is very difficult for professors in colleges to attend at this time. Those are the men I like to hear from. Ordinarily this season of the year is inclement; it is very cold, whereas in March we get weather when people living at a distance suffer less from the difficulties of transportation. I have a letter from one of the older members of the Society, which came yesterday, which I would like to have Dr. Waldo read as giving his views on the proposed change.

The President: Perhaps it will be better to have a motion made on the subject.

Dr. Dowling: So far as the colleges are concerned, it does not make a particle of difference. The first Tuesday in March is the most busy season of the year, so far as the colleges are concerned, for it is about the commencement of the examinations, and that is of as much importance as the lectures are. So far as the attendance from the larger cities and smaller towns is concerned, it would be quite as difficult to get attendance the first week in March as in February. If I remember right it was urged at a previous meeting that this was the best season to hold it, both for those living in New York and in the country. If there is to be any change at all, I should like it to be in October or November, when there will be a larger attendance. I know in the city those are the healthiest months in the year. It does seem a pity that there should be so small an attendance. I had the pleasure of attending a meeting at Providence, R. I., and their attendance was as large as this Society. I know in New York and Brooklyn physicians can not get away at this season; the sacrifice is too great, and if they were willing to make the sacrifice they could not leave their patients. In October we have lots of spare time, and if it could be arranged at that time let us have the semi-annual meeting at this season when it is more difficult for people to travel. Those are not likely to be so interesting.

Dr. Boocock: It seems to me the remarks made by Dr. Dowling are applicable to this matter. It does not seem to me we are going to gain anything by changing the meeting until March. There is another reason why March would be objectionable. Physicians are politicians in villages, and it is well known the annual town meetings occur in March. I know country physicians are more or less likely to be interested in town elections, and they would be likely to say I will rather attend to my town meeting than go to Albany. The weather is more objectionable then than it is in February, because it is boisterous and slushy. I think it would be better to have it in May or October.

The Secretary: I have a letter here from Dr. L. B. Wells, addressed to Dr. Coburn, which I will read. [Communication read.]

Dr. Dowling: I would like to move an amendment if it is in order.

The President: It is not in order. We are obliged to vote on the

resolution offered, and if any other change is proposed, propose it for the next year.

Dr. Mitchell: The subject was up last year on a motion to change the time to rather late in the fall, and the members of the Society took very strong ground against any change in view of the fact that the Legislature was in session at this time. I was not conversant with the subject, and could not speak from experience. They said it was very necessary, and it proved so last year, that a committee of this body should visit the Legislature at the proper time, and it was almost impossible to get them together if the Society was not in session. They opposed any change last year, and I do not see why it should be passed this year. I do not think a change in a month will make any difference.

The motion was then put and lost.

The President: The next business is to receive the report of the committee in the matter of an appeal by Dr. S. S. Guy, to the State Society, from the decision of the Kings County Homœopathic Medical Society.

Dr. Talcott: I greatly regret being unable to make a report at this time. The other members of the committee are not present, and more than that we have not been able to collect all the evidence on both sides which we have called for. We have been promised all the testimony on both sides, but have not yet received it. In addition to that I have received a letter from Dr. Guy, stating that he will be present to-day or to-morrow if possible, and he hoped I would not present a report and go on with the matter until he was present. Of course it is right that we should allow the person interested to be present when such a report is made. I received this morning a long communication containing the proceedings of the Kings County Society, and I have not read them yet, and I have quite a mass of testimony which I would like to read before making any report.

Dr. Hasbrouck: I have a pretty full knowledge of this matter and have some sensitive feeling on the subject. I move that the committee be given until to-morrow morning to present a report.

Dr. Talcott: I object to it on the ground that the other members of the committee are not here, and I do not care, in such a serious matter as this to assume the responsibility of making a report. I do not believe Dr. Hasbrouck will ask me to. If the other members of the committee are present to-morrow morning, we will look the matter over, and if the majority are willing we will make a report.

The motion was put and lost.

The President: The next business in order is the report of the Bureau of Medical Societies and Institutions. I will call on Dr. Dowling for a report from the New York Medical College.

Dr. Dowling: I have not had time to prepare a report, but I will say, our class this year is the largest we have ever had, and the prospect is it will be the largest graduating class we have ever had. Our course of instruction is more thorough than it ever has been before. I refer to the number of lectures delivered and the number of subjects considered. Pathological anatomy is thoroughly taught, and histology is thoroughly taught; and as you know, the department of physical diagnosis of diseases of the heart and lungs has been added to our course of study, and the same

is thoroughly taught. Our examinations, semi-annually, are more thorough than ever, and many are afraid to enter our college as they dread the examinations. We are glad they do, and I am perfectly satisfied that by raising our standard of qualification a great many young men stay away from the college, because they stand in fear of the final examination. I do not say this to frighten any young men who desire to come into the college, but it is the most thorough of any examination for the degree of M. D. in any college in the United States. I assert this most emphatically and stand prepared to prove it. Any man who carries away a diploma of the New York Homœopathic Medical College is entitled to it. I will furthermore say, we examine in nothing we do not teach. I mean by that, our course of instruction is as thorough and as complete as it can be made in the time we consume in the course of lectures. There are many of our graduates present, quite a number, and I am proud of every one of them. Some of them have risen high, and there are many from the graduating class this year, who will rise equally high, in the profession. For the benefit of those who are not aware of the manner in which we conduct our final examination, and have listened to the remarks of certain antagonistic members or officers of the faculty, which were made without cause, and have heard them pooh pooh, as I have known of some doing, at the New York Homœopathic Medical College, when they know nothing about it, never attended a lecture, and could not begin to pass the examinations our boys pass when they go out with diplomas in their hands, I will say that every student is examined orally by the professors. The junior students must pass a satisfactory examination in the junior branches before they can become senior students, and before they can become candidates for graduation. Until they have received from the junior professors certificates that they have passed satisfactory examinations in anatomy, physiology, or whatever it may be, they cannot hand their names in as candidates for the degree of M. D. Then, if they have fulfilled the requirements of the law, we recommend three courses of lectures. It is impossible to enforce it, because a man may come this year and attend a course, and next year from matters of economy, he may be obliged to stay home and study, he having been a student under some physician in good standing, and the next year he comes, but before he gets his diploma, he must pass a satisfactory examination in the studies other students have gone through. So with the senior branches, every student is examined orally by his professor. Then comes a written examination in every department taught. The students assemble in the presence of the faculty and write answers to questions, and then we select those from the class who pass our examination satisfactorily. They are sent to our Board of Censors, consisting of five prominent physicians in the city. They know nothing about the students and have no interest in the college aside from keeping up the standard and elevating it. These censors examine the students privately, and they have the power over and above the faculty to reject any who may have been sent before them. The censors recommend to the board of trustees, and the trustees of course graduate, all recommended by the censors. I feel we are trying to elevate the standard. You can look around you. We have three or four or five graduates of the college in this room, and they speak well of the college,

but they are merely a fair representation of the average class. We propose to do more in the future, when the State Legislature in every State in the union passes a law making the time of study five years instead of three, as now. Then we will turn out for you men that you and I and all may be proud of. This must be done by National Legislation, as in my opinion it cannot be done by State Legislation. Dr. Gray has sent a form of a bill here which I heartily approve of, but I say the United States Government should take this matter in hand. They have established a National Board of Health to which every State Board is subject, but if there is any thing in the world that effects the health of the United States, it is having thoroughly qualified medical advisers. You and I know that thousands are destroyed every year through the carelessness of unqualified medical men. We have established a law in this State, but they can go to New Jersey or Connecticut and ply their arts. They cannot do it here, and I should like to have a petition originate from the New York State Medical Society, asking Congress to take the matter in hand and regulate the practice of medicine in the United States, and also to regulate the course of study and method of examination, and then I should favor a Board of Examiners for every State, appointed by the National Government to examine, one for New York or Connecticut or California, and let each man who successfully passes one of those boards have a diploma which will entitle him to practice in any part of the United States. We will drop our examinations cheerfully, if such a law as that can be passed, and merely be teachers of medicine instead of teachers and licensers to practice. I should like to have a memorial of that kind prepared by the State Homœopathic Medical Society and presented to the Legislature. I believe it would be constitutional, as Mr. Dwight, President of the Columbia Law School said he thought it could be done and it would be constitutional. I should like the President to appoint a committee to draft a memorial on the subject of medical education, asking for National Legislation on the subject.

The President: We should be glad to hear what Dr. Talcott has to say about the Middletown Asylum.

Dr. Talcott: We have one hundred and ninety-four patients. The two buildings completed some years ago, are full or nearly so, and we have just completed a new building two hundred and four feet long by seventy feet deep which will accommodate one hundred and seventy-five more patients, so that we shall be ready by the first of April, to take such cases as the profession may send for treatment, and we shall have abundant accommodation for them during the next three or four years. The State Legislature has been liberal during three or four years to the asylum, and we have no cause to complain of our treatment by them. There is nothing of any special importance to report except that we are in a happy and prosperous condition. This last year there was the lightest ratio of deaths, and the largest ratio of recovery, since I have been in charge of the institution. It compares most favorably with other institutions. The general death rates in asylums in this State and in England ranges from six to ten per cent, and the recoveries twenty-five per cent, while our recoveries average forty-five per cent, which is very large, particularly for this eastern part of the country. In California, where they get young, vigorous

healthy cases, they run up a greater proportion of recoveries there, but in this portion of the country, where there is a degenerate element of Society the percentage of recovery is very small.

The Homœopathic Hospital, Ward's Island, reported through its Chief of Staff, Dr. A. P. Williamson, as follows:

The daily average number of patients under treatment in 1880 was much greater than that of the previous year. We also find that in 1880 there were seven hundred and ninety-nine more patients treated than in 1879.

The following tabular statement gives, in a concise way the number treated during the year and also the number of births, admissions, discharges and deaths for the year 1880.

Number at the beginning of the year	380
" admitted during the year	3,843
" of births during the year	8
Whole number under treatment	4,231
Number discharged, cured	1,734
" " improved	1,728
" " unimproved	111
" died	221
Whole number discharged	3,794

Of the number discharged 48.53 per cent were cured.
" " " " 48.36 " improved.
" " " " 3.11 " unimproved.

The death rate on whole number treated was 5.22 per cent.

Owing to the number of erysipelas cases received it was deemed best to decline accepting cases of pregnancy. The enforcement of this rule is the cause of our small record of births.

By a slight alteration in the arrangement of our wards we were enabled to receive more cases of the acute forms of disease, and it is with much satisfaction that we see such a great increase in the number of this variety of diseases admitted. This increase of interesting cases is as noticeable in the surgical as in the medical department.

More beds have been added to same wards as follows: the erysipelas wards have been increased to twenty-two beds, the syphilitic to fourteen, the Gynæcological to twenty and the ophthalmic to twenty.

In the erysipelas wards one hundred and thirty-five cases were treated during the year, with a loss by death of only four cases. The death rate being 2.96 per cent.

We treated in our insane wards, during 1880, one hundred and seventy-one patients. As these were all chronic cases, principally dementia and mania, we cannot of course claim any cures, but the small number which died gives us a death rate which is certainly worthy of attention. Only three patients died, consequently the percentage of death was one and seventy-five one hundredths

During the year, strenuous efforts were made to improve our methods of ventilation. Partitions were removed in those places where the entrance of fresh air was obstructed, and in other places where it was impracticable to remove the partitions, doors and windows were made through them.

Disinfection and deodorization received their full share of attention, but unfortunately there is nothing new or interesting to report in regard to them.

There is a common rumor among the profession that this hospital does not receive its just quota of patients, and also that we are stinted in our general supplies. This is entirely erroneous, we do receive our full share of patients, both in number and character of cases. The Board of Commissioners of Public Charities and Correction do all within their power to improve the hospital and all articles asked for, when in the judgment of the Board it is to the best interests of the hospital and department to allow them, are immediately granted.

The President: The hospital on Ward's Island is well managed. At the Alleghany Institution, I think the death rate was four per cent, and that is much more favorably located and has many more advantages than Ward's Island Hospital. I think it is a wonderful showing for Ward's Island. We shall be glad to hear from the New York Hospital.

Dr. Dowling: The wards are full, although one portion of it only is adapted to charitable patients. Since the last annual meeting forty or fifty thousand dollars has been raised by subscription, the interest of which is to go to pay for free beds. We have more than we have had. There have been quite a number of capital operations performed in the hospital with very successful results. I look upon it as a success, although I do not believe in an institution where the expense of living is as much as at some of our hotels. The rich do not need hospitals, because they can go to hotels and select those whom they wish to operate on them. I should like to see the hospital, handsome as it is, devoted to those who are able to pay a reasonable amount, but who are unable to pay for the best skilled men and women in the profession. The hospital is a success and the ladies and gentlemen connected with it are earnest in their work, and their staff consists of a number of very eminent and earnest men, who are very anxious that the institution should prosper.

The President: We should be glad to hear from Dr. Paine, respecting the Albany Hospital.

Dr. Paine: The number of patients in the hospital January 1, 1880, was thirteen. Number admitted during that year, eighty. Total ninety-three. The number remaining in the hospital January 1881, was seventeen; the number of charity patients received during the year, forty-five; number of deaths four, three from phthisis, and one from complication following a surgical operation. The number of patients discharged was seventy-two, forty-one cured, twenty improved, and eleven not improved. There were twelve cases of confinement. The surgical staff of the hospital consists of Dr. Swinburne and Balch, two of the best surgeons in the city.

The N. Y. Ophthalmic Hospital reported the treatment of over six thousand patients during the past year. It was also stated that the new degree of *Oculi et Auris Chirurgus* had been conferred upon its graduates during the past year.

The N. Y. Medical College and Hospital for Women, reported an increased number of students in attendance over previous years.

The President: I believe no new hospital has been established during the past year in the State. We shall no doubt have a report of a number of societies and institutions which will come in under the report of the committee on credentials. If there are any other reports we shall be glad to hear them.

Dr. Hale: I wish to say a word in reference to the Onondaga County Medical Society. We think it has taken a new lease of life. During the last year or two we felt badly about a set of resolutions which was passed by this Society, but about a year ago we came here and the matter was set right, and our troubles ceased. We number thirty-two members. In the city of Syracuse we are united and doing our best for the common cause. We have our share in a hospital called the Home of the Good Shepherd; we have four out of nine of the staff, and have full access to the institution. There was a time when the city of Syracuse could boast of having no homœopathic surgeon, but at the present time we can take charge of all surgical cases that come.

The President: Have you full wards under charge of homœopathic physicians?

Dr. Hale: No, each physician has a right to attend his own patients, and we are also called upon to attend others. The wards of the hospital are not under the control of any physician, and there is no resident physician, but we have full access to it and can take any patient there we see fit. We are also frequently called upon to treat those who desire us to do so.

The President: There is no ward which a physician takes charge of for a certain time?

Dr. Hale: No sir.

Dr. Paine stated that the House of Shelter in the city of Albany is a charitable institution, which has been under homœopathic care two or three years. It contains rooms for about forty inmates.

Dr. E. J. Morgan said, a new organization has been formed in Tompkins county, which on to or three accounts strictly speaking can not be called a homœopathic institution, and yet the majority are homœopaths. The membership includes eclectic and allopathic graduates, but every one believes in the doctrine of similia. Not all of the members are homœopaths. We desire to state our case plainly and I can assure you we have the hearty support of every member of our profession.

Dr. Paine: Does that come in the form of an application for admission to this Society.

Dr. Morgan: Yes sir.

Dr. Paine: I move it be received and that a committee be appointed to report upon it.

The motion was put and adopted, and Drs. H. M. Paine, A. J. Frantz and J. H. Demarest were appointed the committee.

The President: The next business in order is the report of the Necrologist. The following were reported as having died the past year: Drs. M. M. Gardner, A. C. Burke, Warren Freeman, Wm. Wright, Benjamin Lansing, G. D. Crispell. The report was accepted.

Miscellaneous Business.

The Secretary announced that he had received several resignations, and among them that of Dr. A. S. Ball of New York.

Dr. Coburn: It does not seem to me we should allow him to go from us.

Dr. Dowling: I am glad this subject is up. I think if we all knew the lovely christian character of Dr. Ball, some one would move that we decline to receive his resignation and that in future his dues be remitted. I should like Dr. Coburn to make the motion and I will second it. He is a lovely character, and I do not think we should allow him to go from us.

The Secretary read the letter.

Dr. Coburn: I move that the resignation of Dr. Ball be not accepted, and that all previous and subsequent dues be remitted.

Dr. Dowling: I second the motion.

The President: I would suggest that in as much as there might be some question raised at some future time in regard to retaining members without paying their dues, would it not be better to put him on the list of honorary members?

Dr. Coburn: It has been done before.

Dr. Dowling: If he can be made a honorary member, it will be much prettier to accept his resignation as a permanent member, and on the spot make him an honorary member.

The Secretary: You can not do that under the constitution.

Dr. Paine: I think it will be far better to adopt a plan which is carried out by other State Societies, that of retiring all members after the payment of dues for twenty-five years. I hereby give notice that such a resolution will be offered next year, that the Constitution may be amended accordingly.

The President put the motion and it was adopted unanimously.

Dr. Demarest: I would like to know if it would be in order to reconsider the order of business of nominations for the regent's degree?

The President: There is the matter of the resignations now before the Society and I do not think it would be in order just now.

Dr. Coburn: In regard to some of the resignations, I would like to inquire whether a resignation can be accepted when the member still owes dues to the Society?

Dr. Talcott: As I understand it most of them resigned because they moved out of the State. If a man moved out of the State with his dues all paid up it would be hardly fair to ask him to pay now.

Dr. Dowling moved that the resignation of Dr. P. H. Hulst be not accepted, that his past and future dues, until such time as he is enabled to pay them, be remitted.

The motion having been seconded, was put and adopted unanimously.

The President: The next case is that of Dr. Farley.

Dr. Coburn: I move the same resolution with respect to Dr. Farley, that was adopted in the case of Dr. Hulst.

The motion having been seconded, was adopted unanimously.

The President: The next case is that of Dr. T. Dwight Stowe.

The Secretary read the letter and card which had been received from Dr. Stowe.

Dr. Dowling: I move that his resignation be accepted, and that his letter be returned to him with the compliments of the Society as an insult to it.

The resolution was unanimously adopted.

Dr. Demarest: I move to reconsider the order of business, relative to the nomination of the regent's degree, and I do it, sir, for the purpose of nominating our old friend, Dr. A. S. Ball, for the regent's degree.

The motion to reconsider was carried.

Dr. Demarest: I now nominate our venerable friend, Dr. A. S. Ball, for the regent's degree.

Recess until 2:30, P. M.

AFTERNOON SESSION.

The Society resumed at 2-30, P. M.

The President: After the communication from the Central Association which was received this morning and ordered to be referred to a committee, I did not name the committee but will do so now: Drs. J. J. Mitchell. C. Sumner and E. Hasbrouck.

The President: The next business in order is the report of the Bureau of Materia Medica.

Dr. Mitchell: I have had the promise of a number of papers, but have received only three, and as they are somewhat long I have submitted them to the President, and he suggested that they be read by title, with one exception. The first one is from Dr. Mandeville, of Brooklyn, on the subject of materia medica generally. The second is a review of the article which Dr. Paine published, and which was presented at the last meeting of the State Society, entitled "The Law of Potencies; the Minimum against the Small Dose." It is written by an honorary member, and will simply be read by title. The next is entitled "The Experiment of Allopathic Homœopathy." I will read it.

There being no discussion on the subject, Dr. T. L. Brown was elected chairman for the ensuing year.

Color Blindness.

The President: The next business in order is the report of the committee appointed at the semi-annual meeting to memorialize the Legislature on the subject of tests for color blindness, Dr. F. Park Lewis to read the report.

Dr. Lewis: Your committee would report that having given the matter very careful attention and investigated the law passed by the Connecticut Legislature in relation to this matter, as well as the suggestion made to the Massachusetts Legislature, it has been deemed best not to specify to the Legislature of New York, the manner in which the tests should be made, but simply to offer the memorial which I will read, and which has been approved by the members of the committee. It is as follows:

To the Honorable the Assembly of the State of New York:

Your petitioners, the Homœopathic Medical Society of the State of New York, beg leave to bring to the notice of your honorable body the necessity of the enactment of laws providing for an examination of the visual acuity

and color perception of all railway employes in this State whose duties require a differentiation of the usual color signals. The necessity of protecting the traveling public by such legislative enactments has been demonstrated by extensive tests made both in this country and in Europe when a total inability to distinguish certain colors—notably red and green—was shown to exist in about four per cent. of all the males examined.

When the importance of readily distinguishing between the ordinary signals by locomotive engineers or firemen, train conductors or brakemen, station agents, switchmen, flagmen, gate tenders or signal men is remembered, the dangers arising from this optical defect will be apparent.

Your petitioners, therefore, pray that by legal provision, examiners shall be appointed, and by them uniform tests be made in such manner as your honorable body shall direct, upon all locomotive engineers and other railway employes mentioned, now engaged upon railroads in this State, and that only such be retained as can present from such examinations a certificate of visual acuity and good color perception, and that all applicants for any of the positions named shall present such certificate before they shall be employed, and that such examinations shall be made at such stated times as your honorable body shall direct. That we further urge that such examinations be made by experts.

[Signed.] F. PARK LEWIS, M. D.,
T. F. ALLEN, M. D.,
W. S. SEARLE, M. D.,
GEO. S. NORTON, M. D.,
C. E. JONES, M. D.,
} Committee.

The suggestions made in this paper, as you see, merely urge the Legislature to take some steps in this matter and the committee appointed by them can afterwards determine the special manner in which this examination shall be conducted. Your committee beg leave to offer this report for your consideration.

The President: It is brief and to the point, but yet of very great importance, as we think. The subject is one we think very far reaching and of great practical value and importance, and it is necessary we should move properly. I would suggest that the committee have power to go on and present the memorial to the Legislature.

Dr. Brown: I move that the report be accepted and adopted, and the committee be reappointed with instructions to present the same to the Legislature.

Dr. Boocock: It seems to me that in the matter of color blindness the examiner should always take his patient when sober. I believe one-half of the color blindness is the result of the alchoholic action upon the eye, producing color blindness, and that this produces more accidents than any thing else. If the committee would append to it some prohibitory law compelling all connected with railroads and steam boats to be total abstainers, I think it would be a great addition and prevent a great deal of color blindness.

The motion was put and carried.

Physical Diagnosis.

The President: The next business in order is the report of the special Bureau of Physical diagnosis, Dr. J. W. Dowling, Chairman.

Dr. Dowling: In appearing before you this afternoon, I feel that an apology is due for what might appear to be gross negligence on my part. Some weeks since when your Secretary wrote me to know if I would prepare a paper to be read at this meeting, I replied that I would, and selected for my subject, "The Pathology and Physical Signs of Acute and Chronic Pulmonary Diseases." I postponed the writing of my paper from day to day, and from week to week, and as the time drew near for the meeting of the Society and no opportunity offered for its preparation, I became anxious regarding the fulfillment of my promise, and was almost tempted to remain away when, happening to think of some very beautiful pathological cardiac specimens in my possession, and knowing that the subject was an interesting one, and that it was rare that the general practitioner had an opportunity to actually handle such specimens and note the changes in valvular diseases of the heart, I concluded, instead of sending a letter of regret, to come to bring these specimens with me, and if agreeable to the Society to say a few words with regard to them and other remarkably interesting cases, which have recently come under my observation.

My attention has been particularly called of late to the large number of cases of endocarditis, some resulting in permanent valvular lesions, which have originated apparently without any cause, at least so far as previous disease was concerned. We all know that in the large majority of cases of valvular disease there is a rheumatic history, in other words nearly all cases of endocarditis, whether they result in permanent cardiac derangement or not, are preceded or complicated, by articular rheumatism. So general is this that if a rheumatic history is denied we are almost tempted to doubt the statement It is true we do have endocarditis as a complication of Bright's disease, septicæmia, and other conditions in which there is dyscrasia, but I refer to cases where these conditions can be excluded. From careful observation and enquiry, I have come to the conclusion that all such cases are either the primary manifestations of, or are consecutive to rheumatic attacks, and that rheumatism in a mild form is far more common than is supposed, and that endocarditis, particularly in a subacute form, is quite as liable to complicate these mild attacks as it is the more severe. A child complains of muscular pains, desires to remain from school, and prefers the recumbent position; but little attention is paid to his complaints, the physician is not consulted, these mild illnesses are forgotten, and subsequently an unaccountable valvular disease of the heart is discovered. Are not these so-called "growing pains" rheumatic in their character, and is not the cardiac disease associated with them? I can call to mind no less than half a dozen such cases which I have been called upon to teat; and believe that many of you who have such cases under your

care will learn by careful investigation that during childhood the patient suffered in this way. A case in point occurred in my practice a few weeks ago. I was invited by a professional brother to be present at the autopsy of a young man who had died of what had been correctly diagnosed, stenosis of the mitral orifice with insufficiency of the valves, complicated with constriction of the aortic orifice. The history of the case with the pathological lesions found at the post mortem are so interesting that I shall endeavor from memory to relate them, and demonstrate the cardiac changes by one of the specimens I have with me to-day.

In a few words the history of the case was this. Some eight or nine years ago this patient, then a boy of ten or twelve years of age, came under the observation of my friend, a graduate of the New York Homœopathic College. He had been examined by one of the most prominent specialists of New York Old School—the case had been correctly diagnosed and the prognosis given that it was utterly impossible for him to live longer than twelve months. He was then placed under homœopathic treatment and was kept in comparative health for some eight years; whether this was owing to the treatment he received or whether the specialist was unguarded in his prognosis, I am hardly prepared to say. I think we are liable to give too unfavorable a prognosis in cardiac diseases generally. Upon the discovery of a heart murmur, we are apt to conclude that the patient has but a short time to live. I know of a number of cases, which have been under my own observation and that of other physicians, where the patients have lived in comparative comfort for many years after the discovery of serious organic lesions of the heart, proper care having been exercised as to habits of life, diet, etc.

In the case to which I am referring there was no history of previous rheumatism or other serious disease. At the time he came under the care of my friend he was blanched, anæmic, emaciated, and suffering from a catarrhal condition of the stomach and intestinal canal. The physical examination showed an enlarged and dilated heart, the cardiac dullness extending about an inch to the right of the sternum, and to the nipple line on the left. Upon auscultation a loud presystolic and systolic murmur was heard taking the place of the first sound of the heart, heard most distinctly at the apez, and with considerable intensity at the base of the heart, the second sound at the aortic orifice being remarkably feeble. The pulse at the wrist almost imperceptible. There was no evidence of pulmonary disease, although the patient suffered from a cough probably resulting from bronchial hyperæmia. The patient was sent into the open air, his diet was regulated and he was placed under remedies indicated by his condition, among other Cactus, Digitalis and Arsenicum. Marked improvement showed itself shortly after he came under the doctors care.

He remained in comparative health, occasionally consulting the physician, until a few months before his death when he began to decline. The pulsation of the heart, which had been irregular, became more so; the urine became scant, scarcely exceeding in quantity half a pint a day, and contained albumen and hyaline casts. The area of cardiac dullness had increased, the action of the heart became feeble, the pulse grew weaker from day to day, until finally he died with general dropsy, the œdema commencing as it always does in these cases in the lower extremities. As I said, I was present at the autopsy. Upon opening the thorax we found an accumulation of serum in both pleural cavities, more in the right than in the left. I have noticed this latter point before in other cases, when I have made post mortem examinations, and in the living subject, but have generally found upon inquiry that the patient had been in the habit of lying upon, or inclining towards the right side, the fluid naturally gravitating towards that side. But from the fact that some authorities state it as the rule, there may be causes other than the one I have given.

The lungs were congested and œdematous, and upon making a section of the lower lobe of the right lung we found it almost solid from hypostatic engorgement, and discovered two or three abscesses near the surface posteriorly. These were undoubtedly the results of hemorrhagic infarctions. Owing to the valvular obstruction on the left side and the feeble action of the heart, clots of fibrin had formed in the right auricle and ventricle, and small particles of these had been washed with the current through the pulmonary artery and its branches, and had gone on and on until they reached a point where it was impossible for them to proceed further, clogging the artery and obstructing the circulation at that point, and producing a hemorrhagic infarction beyond. These infarctions are frequently very small, but sometimes assume quite large proportions, of course depending upon the size of the embolus occluding the artery. Differences of opinion exist as to how this condition, which is a true pulmonary apoplexy, is produced. The most plausible is this: The embolus producing the obstruction does not immediately cut off the entire supply of blood to the parts beyond, although it is of course greatly diminished; the current is however lessened, the blood globules become adherent in the capillaries, their progress is arrested; with each systole of the ventricle, more and more blood is sent beyond the obstruction, and consequently those vessels and capillaries become more and more engorged, the capillary walls rupture and the blood is poured into the vesicles, into the extremities of the bronchioles, and into the interstitial tissue in the immediate vicinity; finally the embolus becomes so firmly wedged that the hemorrhage is arrested. In some cases the coagulum resulting is absorbed, in others an abscess results as in the case to which

your attention has been called. While alluding to the subject of abscess as a result of hemorrhagic infarction, I wish to call your attention to quite a number of cases we have seen lately reported in our journals as abscess of the lungs, in some cases discharging quarts of pus. An abscess of the lung of any size is one of the rarest of pathological conditions and never occurs except as a result of a croupous pneumonia or of the occulsion of one of the larger branches of the pulmonary artery, and I have failed to find the record of a well authenticated case where its dimensions were greater than a good sized orange. Of course in such cases, around the tissue from which the abscess is to be formed, an interstitial pneumonic inflammation must be established by which the abscess is wholly incapsulated. The cases reported to which I allude were undoubtedly cases of empyema. But to return to our post mortem. The pericardial sack contained three or four ounces of serum. The heart was enormously hypertrophied and dilated, but the enlargement was confined to the right auricle and ventricle and to the left auricle; the left ventricle being even smaller than would have been expected in a healthy heart from an individual of such size. The edges of the tricuspid valves showed no evidences of disease, although thickened as if they had had an extra amount of work to do. So with the semilunar valves at the pulmonary orifice. The interesting features of the case centered in the left ventricle and its orifices. As I said before, the ventricular cavity was even smaller than normal, the walls were not hypertrophied as were the walls of the other cavities of the heart. The segments of the mitral valve were thickened and adherent so that they formed a diaphragm between the auricle and ventricle, and in this diaphragm was a small slit surrounded by a cartilaginous ring, so small as hardly to admit the passage of an ordinary sized lead pencil. The semilunar valves at the aortic orifice were also the seat of disease, containing calcareous plates and so thickened that the passage of the blood from the ventricle into the aorta must have been seriously interfered with during life. The aorta seemed contracted.

We examined the liver and found it hypertrophied, indurated, engorged and in the condition known as nutmeg liver. The stomach was dilated and distended with gas. The kidneys were enlarged and congested but otherwise showed no evidences of disease. The brain was not examined. Now from the pathological condition found in this case I contend every symptom from which the patient suffered during life could be accounted for, and the state of the valves of the left side of the heart would account for the changed condition of every organ examined. It would account for the hydro-thorax, the engorgement and œdema of the lungs, the hydro-pericardium, the dilation of the left auricle, the hypertrophy and dilatation of the right verticle and auricle, the condition of the liver, stomach,

intestinal canal and kidneys, and for the albuminuria. It would also account for the diminished size of the left ventricle and the thinness of its walls.

The heart taken from this subject, which weighed 17 ounces, was unfortunately destroyed by the evaporation of the alcohol in the jar which contained it, but I have here another specimen which corresponds so accurately with the one described that it will be well for you to look at it. You will please note the thickened walls of the right ventricles, the dilated auricles, the thickened mitral valve stretched across the auriculo-ventricular orifice and containing calcareous plates, the thickened segments of the aortic valve and the narrowing of the orifice, also the diminished size of the left ventricle and the comparative thinness of its walls. If this constriction at the aortic orifice had existed uncomplicated with mitral disease, we would have found the left ventricle dilated and enlarged, and, so long as the hypertrophy remained sufficient to compensate for the diminished size of the outlet, there would have been no pulmonary engorgement; neither would there have been increase in the size of the other cavities of the heart, and the various organs of the body would not have suffered. But this constriction of the mitral orifice prevented the free passage of blood from the auricle into the ventricle, dilating the auricle, overloading the pulmonary veins, engorging the lungs, and giving the right heart so much extra work to do that its cavity was dilated, its walls were necessarily thickened. When they began to degenerate, as they always do when the death process is slow, the systemic venous circulation became overloaded, which accounts for the engorgement of the liver, spleen and kidneys, and the catarrhal condition of the stomach and intestinal canal. The small quantity of blood permitted to flow through the mitral orifice accounts for the diminished size of the left ventricle and the thinness of its walls. Muscles always become atrophied when they have less than their normal amount of work to do. The small quantity of blood discharged with the systole of the left ventricle accounts for the blanching of the skin, and the greatly diminished quantity of urine.

In contrast with this hypertrophied heart, I now show another taken only yesterday from the body of a patient who died of phthisis, a male adult measuring five feet eight inches in height, but much reduced in weight, owing to the protracted and wasting disease from which he died. As you will see, although much diminished in size, weighing but six ounces, it shows no evidences of disease. The normal weight of the adult heart is from nine to ten ounces. If the quantity of blood in the body becomes gradually diminished, the labor of the heart is reduced and it consequently atrophies. A short time since I was present at the autopsy of a patient who had died of carcinoma of the rectum after an illness of

some years duration. The heart, which was the smallest I had ever seen taken from an adult, weighed but three and three-quarter ounces.

In this specimen, which I hold in my hand, you will see entangled in the trabeculæ of the right ventricle one of those fibrinous clots to which allusion was made a short time since. I have one of these anti-mortem clots preserved at home which entirely filled the pulmonary artery at its origin. Imagine a small piece of this clot detached and washed with the blood current, you can understand how it will form an obstruction to the flow of blood in the locality, when owing to the diminished size of the arterial branch, it lodges. If from the right side of the heart, the embolus would result in a hemorrhagic infarction of the lung, if from the left, it may find a lodgment in the spleen, in one of the cerebral arteries, cutting off nourishment to the part supplied by the vessel, and, unless a collateral circulation is established, producing necrosis with softning of the part, or it may find a lodgment in one of the vessels of the lower extremities. Only a few weeks ago a brother of one of my patients had his leg amputated, for mortification resulting from the lodgment of an embolus in one of the large arteries of the extremity.

I wish now to call your attention to these delicate membranes which form these valves. You will see this little valve is almost as thin as a spider's web. I stretch it over the end of my finger, it is almost transparent, and scarcely perceptible to the sight. This is a segment of the semilunar valve at the aortic orifice. We can but be astonished at the strength and resisting power there is in these web-like valves. The subject from which this heart was taken, was injected with a mixture of plaster of Paris and the red lead for dissecting purposes. The nozzle of the syringe was passed into one of the carotid arteries. I hold in my hand a cast of the root of the aorta showing the form the valves assume when stretched by the column of blood in that vessel during the diastole of the ventricle. Here are perfect casts of the sinuses of Valsalva, and these two small projections show the origin of the coronary arteries. Notwithstanding the fact that the preparation has penetrated the most minute branches of these vessels, requiring all the force which a strong man could bring to bear, these delicate valves remained intact, and not a particle entered the ventricle. This injected specimen illustrates a very pretty physiological point which is that the heart is supplied with blood, not during its systole, as is the case with every other organ of the body, but by the recoil of the blood during the diastole of the ventricle. You will see that upon the contraction of the ventricle, when these semilunar valves fly back against the walls of the aorta they effectually close the orifices of the coronary arteries, then owing to the recoil of the blood and the elasticity of the aortic walls, the blood rushes back against the valves closing them, and at

the same time sending the blood into the coronary arteries while the heart walls are in a relaxed state. You can readily see what a wise provision of nature this is. It would be utterly impossible for the organ to be supplied with blood during systole while its arteries were compressed by the contraction of its muscular fibres.

Another point. If the mouths of these coronary arteries were not covered by the segments of the valves during the ventricular systole, from the fact that they run in an opposite direction to the blood current in the aorta, their contents would be sucked out by the force of the stream in that vessel.

In aortic insufficiency, owing to regurgitation into the ventricle from the imperfect condition of the valves, the blood is not sent with proper force and quantity into the coronary arteries, consequently the heart is poorly nourished, and where in this disease the patient does not die of apoplexy resulting from rupture of a cerebral vessel, one of the most common causes of death is fatty degeneration of the heart arising from faulty nutrition of the organ.

Here is another heart which weighs eighteen ounces, with somewhat similar valvular derangements. Before closing I wish again to call your attention to the diminished size and thickness of the left ventricle in this heart which arose from the obstruction existing at the mitral orifice, and to this specimen where the left ventricle owing to incompetency of the aortic valves and stenosis of the orifice is enormously hypertrophied. There is no mitral derangement in this case, consequently the right side of the heart is not materially altered in size.

A member of the Society asked the doctor if he had seen many cases of fatty degeneration of the heart. In reply the doctor said: Fatty degeneration of the heart, uncomplicated with valvular disease, is not so common as is supposed. Where it does exist it is generally in the aged, and you will also find fatty degeneration of other portions of the body; of the arteries, of the nerve structures, of some of the viscera, and of the muscular tissues generally, and particularly the well known arcus senilis, which arises from fatty degeneration of the edge of the cornea. You will also find in the majority of cases ossification of the cartilages of the ribs which as with ossification of the arteries is but a later stage of fatty degeneration, and is always preceded by it. A distinction must be drawn between fatty heart and fatty degeneration of the heart. In the one case we have with general obesity a deposit of fat upon the heart and between its muscular fibres; in the other actual degeneration of the muscular tissue of the organ. In the first condition the action of the heart is labored and materially interfered with. In the other it is permanently impared, and is equal only to the most gentle exertion. The

patients suffer finally from pulmonary engorgement with œdema, and die either from this œdema or from anæmia of the brain, owing to inability on the part of the heart to sufficiently supply the brain with blood.

Only recently I was in attendance upon a case of this kind in consultation with a physician in New York. We found the arcus senilis well marked, the ribs immovable from ossification of their cartilages; the action of the heart feeble; the sounds of the heart almost imperceptible although pure, the pulse hardly distinguishable at the wrist, the lungs œdematous. He raised himself suddenly from a recumbent posture, at night while in bed, and fell back in a state of syncope from which he did not rally. The heart in its degenerated state was not equal to the increased exertion necessary to supply the brain with blood in this changed position of the body.

The President: The next business in order is the report of the Bureau of clinical medicine. The Secretary said that he had received a paper entitled "Clinical Notes," by Dr. J. C. Morgan, also a paper by Dr. H. D. Paine on "Some New Observations on Peptone," and a paper by Dr. Titus L. Brown, entitled "What Cures and who Knows." The last paper was read by the author. A paper by Dr. R. C. Moffat, on "Erysipelas" and one by Dr. Guernsey, "Regimen for the Sick," were read by title.

Dr. Boocock read an article on polypus and said he simply wished to call the attention of the Society to it as a patient of his had suffered considerably with them and had had them twice removed by the knife, but after each removal they grew again. He tried Kali bich,and on the fifth application it was removed entirely. After two months there has been no sign of a regrowth.

The President: You applied it to the surface?

Dr. Boocock: Yes, by a camel hair brush. And after the second application of a strong solution we found it was going so rapidly and there was such a hot feeling that I weakened it by adding a portion of glycerine to it. The fifth application, five days in succession removed the matter entirely.

Dr. Demarest: I call the attention of the Society to the use of Acetic acid in polypus, injecting it. I think one application will effect a cure.

Dr. Delavan: I know of a case of nasal polypus being cured by one application of a subcutaneous injection of acetic acid.

The Bureau was then closed.

The President: I hope you will not think the President is stepping beyond his prerogative in saying the Chairman of a Bureau should be interested in the subject. It seems to me to be highly necessary, not only that they should be willing to serve but also that they should have thought of the subject before hand, and be willing to study in that line of thought.

Dr. Hills: I think it is unfortunate that the Bureau should be closed as quickly as this. It should be left open, because there may be more papers to read and some gentleman may like to make some remark upon the subject of the papers presented. I move that the Bureau remain open for further consideration until to-morrow. The motion was adopted.

The President: The next in order is the Bureau of Surgery, but as there are no papers in that Bureau, I will call upon Dr. Delavan to read his paper on the work of the State Board of Health.

Dr. Delevan then read his paper.

The President: This is a new matter for us, and it is our duty and privilege to become greatly interested in the State Board of Health especially as we have so valuable a representative on it.

Dr. A. K. Hills: I have listened very attentively to the paper, and think it a very valuable contribution, and I offer the following resolution:

Resolved, That we have listened with pleasure to the report of the doings of the State Board of Health, as presented by Dr. Delavan, and we hereby express our confidence in and co-operation with said board.

Resolved, That the members of this Society be urged to contribute to its support by every means in their power.

Resolution was adopted.

The President: The next business in order is the report of the Bureau of Mental and Nervous Diseases.

Dr. Talcott: The Bureau of Mental and Nervous Diseases presents as usual a lengthy report. We have the pleasure of offering four articles, one on "Circular Mania," one on "Acute Delirious Mania" one upon "Restraint or Non-Restraint of the Insane," by the Superintendent, and another by the Superintendent.

The papers were read.

Dr. Talcott: I wish special attention to the paper on "Restraint or Non-Restraint of the Insane," because it is a question which now engages the attention of the public mind, and not for the intrinsic merits of the paper. I hope if it meets with the approval of the Society it will meet with its endorsement, but if not I hope it will not be endorsed.

The President: The matter is of great interest and has been discussed at great length in all parts of the State.

Dr. Talcott: I have another paper to present, but it is a good deal too long to be read to night, and if there is any opportunity to read it tomorrow I will do so. If not I will let it go.

Dr. Paine: I offer the following resolution, that we have heard with pleasure the article of Dr. S. H. Talcott, on "Restraint or Non-Restraint in the Treatment of the Insane," and we heartily endorse the prudent course adopted at the asylum at Middletown in this matter.

Dr. Demarest seconded the resolution, which was adopted.

Dr. Hills: I move that Dr. Talcott be invited to read his paper on the "Insane Diathesis" this evening after the Presidents address. [Adopted.]

Dr. H. M. Paine, from the committee to which was referred the matter of the Tompkins County Society presented the following report:

The committee to whom was referred the application from the Medical Society of Tompkins County for representation in this Society, hereby recommend that the application be received, and that the delegates appointed be accorded all the privileges of membership provided by the by-laws of the Society.

The constitution of the Society in article V states that the Society shall be composed of delegates from country homœopathic medical

societies, homœopathic medical colleges *and such other members as may be designated in the by-laws.*

Section IX of the by-laws regulates the numerical basis of representation from county societies and medical institutions.

Your committee would recommend the addition to the first paragraph of the following:

"Also delegates from other county or local medical societies in the proportion of one delegate for every ten members thereof."

Inasmuch as the by-laws of the Society can be altered or amended by a majority vote, the committee would respectfully present the foregoing in the form of a resolution.

The committee would take this occasion to state that in their opinion the Society should welcome accessions to its membership of educated physicians, they would advocate the largest liberty of opinion and the utmost freedom of professional intercourse. They would fully endorse the noble sentiments forcibly enunciated by Dr. Carroll Dunham in his address on "Freedom of Medical Opinion and Action, a Vital Necessity and Great Responsibility."

Respectfully Submitted,

H. M. PAINE,
J. H. DEMAREST, } Committee.
A. J. FRANTZ.

Dr. Hills: Do I understand that that admits them as delegates?

Dr. Paine: Yes.

Dr. Boocock: I move the report be accepted. [Adopted.]

Dr. Demarest: I move the adoption of the report.

Dr. Boocock: I move as an amendment that it be laid upon the table for a year to give the opportunity for them all to become homœopathic physicians, as very many of the physicians associated with them are allopaths and eclectics.

Dr. Paine: I hope that motion will not prevail. I would like to know what good reason Dr. Boocock has for limiting the membership of this Society and excluding any qualified physician? Why is it that an allopathic physician, if he chooses, may not come here and learn something of the homœopathic truths which we teach? If they want to come here, why keep them out? Why keep up sectarianism in medicine? Let all educated physicians come and unite with us. If what we believe to be homœopathic truth is truth, it will prevail, and the wider its extension the better for mankind. It is not wise for us to be exclusive. If homœopathic truth has intrinsic value let allopathists and electics come in and see its practical results. It is a matter in which the old school is making greater strides than we are. At the meeting of the State Medical Society held two weeks ago a motion was made to exclude the New York County Society because it had admitted two homœopathic physicians, but it was voted down, and shall we exclude allopathic physicians? Five or six years ago a member of the Clinton County Society was expelled because he expressed his belief in homœopathic truths, but a few months ago that Society cordially invited Dr. Nichols back to its fold.

Dr. Hills: Upon what credentials do they come? Has the applicant a regular credential?

Dr. Paine: Yes, sir; Dr. Morgan comes here and states the case, and asks whether he can be admitted or not. His credentials are clear.

Dr. Boocock: Dr. Paine asks my reason why I object to the admission of the member. It is not I that objects to it, but the by-laws and constitution of the Society object to it, and they were made before I become a member of the Society. Inasmuch as the by-laws and constitution of the Society make it the Homœopathic State Medical Society, and all its affiliations are homœopathic, and all its members are homœopathic members or call themselves such, and as such are admitted to the various county societies, none other than homœopathic physicians should be admitted here.

Dr. Paine: That cannot be so, because the law provides for only sixteen permanent members and therefore the by-laws must refer to delegate members.

Dr. Boocock: Such is my reading of the by-laws, and I am giving my views. Privately, I said this could not prevail, and I am sorry to be opposed to Dr. Paine, but in as much as Dr. Morgan does not come here and ask the Society to be affiliated as a homœopathic society, I object to it. In order to give them time for the good leven of truth to prevail, I have moved that it stand over for a year, and when it is all levened and become a homœopathic society we shall be glad to welcome them here.

Dr. Frantz: The gentleman who last spoke is laboring under a misapprehension. I will state that this is a homœopathic organization. Dr. Bishop who brought the matter up is a homœopath, and he states there is a law which requires the members to believe in the law of similia before becoming members of the society, and the by-laws of the society also require that. On that I signed the resolution.

Dr. Hills: If it is a legally organized society, I do not see how we can refuse.

Dr. Frantz: It is a country society; the State does not take cognizance of any but State and County Societies.

Dr. Demarest: I cannot understand why this delegation cannot be admitted when they believe in the law of similia.

Dr. C. D. Hale: There is an old adage in an old book which says "be ye not conformed to the world, but be ye transformed." And it seems to me the more we hear about the mixing up with the allopathic fraternity the more we become levened, and the less reason we have to call ourselves homœopaths. I have thought of this matter all the afternoon, and I have talked with the gentleman who represents the society and he tells me it is called the Medical Society of the County of Tompkins. They have relieved themselves of the name of homœopathic, because several gentlemen wished to unite who did not wish to have this stigma on their name, and the majority of them didn't care to declare their adherance to the law of homœopathy, but they proposed to practice medicine in a liberal sense, believing in the law of similia and such other laws as they think proper. It seems to me this is merely a combination of physicians who have organized themselves into a society. The Central New York Society is a society not known to the State Society, and cannot become auxiliary to the State Society, unless the by-laws are changed. I think we should be very jealous of our situation as the Homœopathic Society of the State of New

York, and be very careful how far we go in the direction of liberalism, remembering that liberty is not license.

Dr. Hasbrouck: I think the true reason has not been stated. He does not come here and claim to be a delegate from a county medical society. This book says the Society shall be composed of members of county medical societies.

Dr. Paine: This resolution proposes that he shall come in as a delegate by adding a few words to the by-laws.

Dr. Hasbrouck: Admit what Dr. Paine says, I will ask is there a homœopathic medical society in Tompkins county? Is there a society of men claiming to practice homœopathy? It is their duty if there are five practising homœopathy, to organize themselves into a homœopathic medical society. Our State Society is organized under a law passed by the Legislature and made applicable to us as physicians. Our Society is composed of delegates, from county societies organized in accordance with that law. If this Tompkins County Society is organized under the State law they are entitled to representation, if they are not, they are not entitled to representation.

Dr. Lewis: I simply want to indorse what Dr. Hasbrouck has said. The matter resolves itself simply into the regularity of admitting the members from the organization. The committee have reported that in order that this member or delegate from the society should be admitted into our Society an additional resolution must be passed, and in doing that they have gone outside of their duty. They must report on the admission of the member, and after that report is acted upon a resolution may be introduced by them or any one else.

Dr. Hollett: If we are admitting delegates and representatives of societies that have no right to be in the Society, it seems to me it will be well for us to investigate our by-laws with reference to the constitution of the State Society.

Dr. Paine: This Society has no legal power to act upon any subject whatever. The only legal privilege that this Society ever exercised was that of regulating the practice of medicine. That franchise having been taken away by the law of 1880, this Society is no more able to protect the public from the results of imperfect medical education, than an informal organization would be. I intend to offer a resolution authorizing the committee on legislation to prepare a law, and secure its passage by the Legislature, looking to the admission to permanent membership of any physician who wishes to join the Society, in accordance with our own rules. If the Society desires to restrict it to those who believe in homœopathy, let it do so, but if I could have my way it would not be so. I think the time is near at hand when we shall be glad to admit members whether homœopathic physicians or not, because we should be obliged to do so. If the old school takes the ground first and admits homœopathic physicians, the younger men growing up will see where their interests lie. Will they join a society where they are restricted and required to pronounce the homœopathic shibboleth? They will go to the old societies where they are free.

Dr. Brown: It seems to me that if any gentleman is honest, and thinks he can get benefit from it, he can come in in the ordinary way, and not

want us to take him in and improve him. Let him improve himself, and come in afterwards. We send them literature, and let them improve themselves and then come in. I do not wish to join the allopathic party unless I can see some benefit in it, and if then I do I will leave the homœopathic part of it. I do not ask any allopathic physician to take me unless I believe their system to be true. The difference between homœopathy and allopathy is the difference between light and darkness. Let them take our books and views and improve themselves. If our views are not right, then homœopathy is worth nothing. We simply want to protect our societies. We are liberal. If they want to enter upon a discussion of homœopathy with us we are ready, but we don't want to take them in. We will shake hands with them across the bloody chasm, but let them come over to us. If a man says he belongs to the allopathic society, and wants to come in, let him become converted. We know that they are stealing our remedies. As a homœopathist I would oppose this resolution in toto. They have the opportunities to become homœopaths and let them do so, and not become sneaks. They say it is one of the great principles. We say it is the great principle; if they don't cure on that, what principle do they cure on? Their views are as numberless as the stars. I know Dr. Paine is very fond of running after the allopathic physicians, and he is very anxious to get in with them. If he thinks so much of them let him go over to them. For my part I do not, and therefore I shall vote against the resolution.

Dr. Hasbrouck: I think the matter should be referred back to the committee to make a report on the matter referred to them.

Dr. Hollett: As I understand it the Society has adopted the principle of similia, but the committee has not reported on that at all. It seems to me that it resolves itself into a question of the legal organization of the Society.

Dr. Waldo: The credential simply says that Dr. E. J. Morgan is nominated for permanent membership of the Society, and it is signed A. M. Baldwin, Secretary of the Tompkins County Homœopathic Medical Society.

Dr. Lewis: I move that the report be referred back to the committee with instructions to report specifically on the admission of the delegates to-morrow.

Dr. Hollett: I would move as a substitute that it be referred back to the committee to ascertain and report on the regularity of the Society.

The motion to lie on the table for one year was then put and lost and Dr. Hollett's substitute was adopted.

The committee appointed to consider the communication from the Central New York Homœopathic Medical Society reported as follows:

The undersigned, a committee appointed to consider the statement relating to Dr. Wm. C. Doane, unanimously agree to report that in their judgment the matter has passed beyond the jurisdiction of the State Society.

JOHN J. MITCHELL.
CHARLES SUMNER.
E. HASBROUCK.

Dr. Hills: I move the President appoint a committee of three to nominate chairmen for the bureaus.

Motion having been seconded was adopted, and Drs. Hills, Mitchell and Hasbrouck were appointed such committee.

Adjourned to meet at the New Capitol at 8 o'clock.

EVENING SESSION.

Society met pursuant to adjournment, in the Assembly Chamber at the New Capitol, at 8:30 P. M.

The President delivered the annual address entitled "The Care of the Helpless Dependents of the State," after which Dr. Talcott read his paper on the "Insane Diathesis," after which the Society adjourned until Wednesday morning February 9th, at 9 o'clock.

SECOND DAY.—MORNING SESSION.

The Society resumed at the City Hall at 9:30 o'clock, Dr. E. Hasbrouck in the chair.

The President: At the close of last evening's session we were in the midst of papers from the Bureau of Mental and Nervous Diseases. If there are no other papers to be read and no discussion, the bureau will be declared closed.

Dr. Hills: Before any action is taken, the committee to whom was referred the nomination of chairmen for the bureaus, would report as follows: Chairman of the Bureau of Materia Medica, T. L. Brown, M. D.; Clinical Medicine, A. R. Wright, M. D.; Surgery, W. M. L. Fiske, M. D.; Mental and Nervous Diseases, Wm. M. Butler, M. D.; Pædology, C. M. Conant, M. D.; Obstetrics, A. B. Rice, M. D.; Gynæcology, Alice B. Campbell, M. D.; Climatology, C. A. Beldin, M. D.; Ophthalmology, F. H. Boynton, M. D.; Laryngology, C. E. Beebe, M. D.; Otology, F. Park Lewis, M. D.; Histology, C. E. Jones, M. D.; Vital Statistics, A. P. Williamson, M. D.

Dr. Hollett: I move the report be accepted. [Adopted.]

Dr. Hills: I move that Dr. W. M. Butler, be appointed chairman of the Bureau of Mental and Nervous Diseases, for the ensuing year. [Adopted.]

Miscellaneous Business.

Dr. Waldo: There has been an application made to the Treasurer for certain back volumes of the transactions of the Society, and I move that the Treasurer be empowered to furnish the Surgeon General's Office of the United States, with such volumes of the transactions as may be desired. [Adopted.]

Dr. Howland presented a report from the Homœopathic Medical Society of Dutchess County, showing that it was organized in accordance with law which was accepted.

Dr. Hills moved that the Society proceed to the election of officers. [Adopted.]

The President appointed Drs. Coburn and Williamson tellers. A ballot was then taken for President and Dr. S. H. Talcott having received a majority of the votes cast the President declared him duly elected President for the ensuing year.

Dr. Hasbrouck: I think this Society has honored itself by electing Dr. Talcott President, and I move that his election be made unanimous. [Adopted unanimously.]

Dr. Talcott: Mr. Chairman and members of the State Homœopathic Medical Society. I tender you my most earnest thanks for the very great honor you have conferred upon me, and I promise you so far as earnest effort will conduce to the prosperity and harmony of this Society, that earnest effort on my part will be put forth, and I ask with just as much earnestness that every member of the Society present will aid the President in carrying forward the work of the Society. Thanking you again and believing this is the time for short speeches I will close.

A ballot was then taken for first Vice-President and Dr. J. J. Mitchell, was duly elected.

A ballot was then taken for second Vice-President, and Dr. A. J. Frantz was duly elected.

A ballot was then taken for third Vice-President and Dr. G. W. Peer, was duly elected.

A ballot was then taken for Recording Secretary and Dr. A. P. Hollett was duly elected.

A ballot was then taken for Corresponding Secretary and Dr. H. L. Waldo was elected. Dr. Waldo declined to serve, and another ballot was ordered, when Dr. C. E. Jones was duly elected Corresponding Secretary.

A ballot was then ordered for Treasurer. On motion of Dr. Waldo, Dr. Hasbrouck was authorized to cast the ballot of the Society, for Dr. E. S. Coburn and he was unanimously elected Treasurer.

A ballot was then taken for the nominees for the Regent's Degree.

The President declared Drs. C. T. Harris, A. S. Ball, E. H. Hurd and H. M. Paine duly nominated.

The President announces the following Bureaus:

Surgery.

W. M. L. Fiske, M. D. Chairman, Brooklyn; Drs. W. T. Helmuth, New York; H. Willis, Brooklyn; John Butler, New York; J. H. Tompson, New York; John C. Minor, New York; E. G. Rankin, New York; H. I. Ostrom, New York; H. C. Frost, Buffalo; A. J. Frantz, Geneva; E. J. Morgan, Jr., Ithaca.

Obstetrics.

A. B. Rice, M. D., Chairman, Panama; Drs. E. Guernsey, New York; Robert McMurray, New York; J. R. White New York; L. de V. Wilder, New York; J. H. Demarest, New York; O. Groom, Horseheads; A. P. Hollett, Havana; H. S. Hutchins, Batavia; N. R. Seeley, Elmira; H. Minton, Brooklyn; S. P. Burdick, New York; Chas. R. Sumner, Rochester; F. W. Adriance, Watkins.

Clinical Medicine.

A. R. Wright, M. D., Chairman, Buffalo; Drs. L. B. Couch, Nyack; F. Bigelow, Syracuse; G. E. Tytler, New York; T. F. Smith, New York; C. W. Boyce, Auburn; H. M. Dayfoot, Mt. Morris; L. M. Kenyon, Buffalo; R. S. Bishop, Medina; C. M. Conant, Middletown; A. T. Hills, New York; C. E. Blumenthal, New York; W. Y. Cowl, New York; E. Hasbrouck, Brooklyn; H. Minton, Brooklyn; B. F. Williamson, Prattsburg.

Materia Medica.

T. L. Brown, M. D., Chairman, Binghamton; Drs. T. F. Allen, New York; L. M. Kenyon, Buffalo; A. M. Piersons, New York; S. Talmage, Brooklyn; D. K. Mandeville, Brooklyn; A. P. Cook, Hudson; J. H. Stebbins, Geneva; T. C. Fanning, Tarrytown; D. S. Kimball, Sackett's Harbor; H. M. Paine, Albany; L. B. Wells, Utica; F. E. Robinson, Brooklyn.

Mental and Nervous Diseases.

W. M. Butler, M. D., Chairman, Middletown; Drs. S. Lilienthal, New York; T. L. Brown, Binghamton; A. P. Williamson, New York; C. Spencer Kinney, Middletown; John Butler, New York; H. B. Millard, New York; T. S. Armstrong, Owego; A. S. Couch, Fredonia.

With invited co-operation of Drs. S. Worcester, Salem, Mass., and J. M. Kershaw, St. Louis, Mo.

Gynæcology.

Alice B. Campbell, M. D., Chairman, Brooklyn; Drs. Catharine E. Goewey, Albany; S. P. Burdick, New York; E. W. Rogers, Crystal Springs; Mrs. J. G. Brinkman, New York; Sarah J. White, New York; Anna C. Howland, Poughkeepsie; H. Amelia Wright, New York; J. G. Bigelow, Syracuse.

Department of Laryngology.

J. W. Dowling, M. D., Chairman, New York; Drs. E. J. Whitney, Brooklyn; J. B. Gilbert, New York; F. Seeger, New York; L. A. Bull, Buffalo; C. D. Hale, Syracuse.

Ophthalmology.

F. H. Boynton, M. D., Chairman, New York; Drs. C. Th. Liebold, New York; Geo. S. Norton, New York; D. B. Hunt, New York; W. P. Fowler, Rochester; N. B. Covert, Geneva; F. Park Lewis, Buffalo.

With invited co-operation of Drs. M. Macfarlan, Philadelphia and J. N. Anderson.

Department of Otology.

F. Park Lewis, M. D., Chairman, Buffalo; Drs. H. C. Houghton, New York; W. S. Searle, Brooklyn; N. B. Covert, Geneva; F. H. Boynton, New York; Wm. E. Rounds, New York; W. P. Fowler, Rochester.

With invited co-operation of Dr. T. P. Wilson, Ann Arbor, and J. H. Buffam, Chicago.

Pædology.

C. M. Conant, M. D., Chairman, Middletown; Drs. Alfred K. Hills, New York; R. Oliver Phillips, Yonkers; C. L. Bonnell, Brooklyn; Hugh M. Smith, Brooklyn; Clara C. Plimpton, New York; S. E. Stiles, Brooklyn; H. Amelia Wright, New York; St. Clair Smith, New York; Geo. B. Palmer, East Hamilton; Mary E. Bond, New York.

Climatology.

C. A. Beldin, M. D., Chairman, Jamaica; Drs. A. S. Couch, Fredonia; L. B. Wells, Utica; B. L. Baylies, Astoria; R. S. Bishop, Medina; T. T. Calkins, Hudson; J. F. Atwood, Brooklyn; A. R. Wright, Buffalo.

With invited co-operation of Dr. A. McNeil, New Albany, Indiana.

Histology.

C. E. Jones, M. D., Chairman, Albany; Drs. C. A. Bacon, New York; A. Varona, Brooklyn; F. E. Doughty, New York; C. P. Alling, Bradford, Pa.; A. P. Williamson, Ward's Island, New York; T. C. Fanning, Tarrytown.

Vital Statistics.

A. P. Williamson, M. D., Chairman, Ward's Island; Drs. E. M. Kellogg, New York; Walter Y. Cowl, New York; C. G. Clark, Troy; A. W. Holden, Glen's Falls; L. M. Kenyon, Buffalo; L. M. Pratt, Albany; S. E. Stiles, Brooklyn.

Necrologist.

H. D. Paine, M. D., New York.

REGULAR AND SPECIAL COMMITTEES FOR 1881.

Committee on Legislation.

E. D. Jones, M. D., Chairman, Albany; Drs. Wm. H. Watson, Utica; A. K. Hills, New York; H. M. Paine, Albany; A. P. Hollett, Havana; N. Osborne, Buffalo.

Committee on Medical Societies and Institutions.

A. P. Hollett, M. D., Chairman, Havana; Drs. Asa S. Couch, Fredonia; E. Hasbrouck, Brooklyn; H. L. Waldo, West Troy; G. D. Hale, Syracuse.

Special Committee on Physical Diagnosis.

J. W. Dowling, M. D., New York.

Committee on Medical Education.

J. F. Gray, M. D. Chairman, New York; Drs. W. H. Watson, Utica; A. W. Holden, Glen's Falls; H. D. Paine, New York; John C. Minor, New York.

Committee to report on the matter of an appeal by Dr. S. S. Guy, to State Society from the decision of Kings County Homœopathic Medical Society.

S. H. Talcott, M. D., Chairman, Middletown; Drs. R. A. Adams, Rochester; C. Ormes, Jamestown.

DELEGATES TO OTHER SOCIETIES.

World's Homœopathic Convention to be held in London, England, July 11th, 1881.

Drs. J. W. Dowling, New York; Wm. Tod Helmuth, New York; S. H. Talcott, Middletown.

American Institute of Homœopathy.

Drs. A. S. Couch, Fredonia; Wm. Tod Helmuth, New York; W. M. L. Fiske, Brooklyn; A. W. Holden, Glen's Falls.

Connecticut Homœopathic Medical Society.

Drs. C. Spencer Kinney, Middletown; B. G. Carleton, New York; E. J. Whitney, Brooklyn.

Illinois Homœopathic Medical Society.

Drs. C. E. Swift, Auburn; R. S. Bishop, Medina; R. A. Adams, Rochester.

Indiana Homœopathic Medical Society.

Drs. C. Ormes, Jamestown; O. Groom, Horseheads; N. R. Seeley Elmira.

Iowa Homœopathic Medical Society.

Drs. J. Ralsey White, New York; C. D. Hale, Syracuse; Henry Minton, Brooklyn.

Missouri Homœopathic Medical Society.

Drs. L. M. Kenyon, Buffalo; C. R. Sumner, Rochester; A. B. Carr, Rochester.

New Hampshire Homœopathic Medical Society.

Drs. N. H. Haviland, Fulton; W. E. Milbank, Albany; H. L. Waldo, West Troy.

New Jersey Homœopathic Medical Society.

Drs. E. Hasbrouck, Brooklyn; Wm. M. L. Fiske, Brooklyn; W. S. Purdy, Corning.

Ohio Homœopathic Medical Society.

Drs. F. Park Lewis, Buffalo; A. B. Rice, Panama; Jay Ball, Cortland.

Pennsylvania Homœopathic Medical Society.

Drs. A. P. Williamson, Ward's Island, New York; A. P. Throop, Poughkeepsie; H. Baethig, Buffalo.

Kansas Homœopathic Medical Society.

Drs. Thomas Wildes, New York; T. T. Calkins, Hudson; S. E. Stiles, Brooklyn.

Maine Homœopathic Medical Society.

Drs. F. L. Vincent, Troy; G. C. Hibbard, Adams; A. B. Southwick, Rome.

Massachusetts Homœopathic Medical Society.

Drs. Henry M. Smith, New York; C. E. Jones, Albany; J. A. Biegler, Rochester; Anna C. Howland, Poughkeepsie.

Michigan Homœopathic Medical Society.

Drs. H. S. Hutchins, Batavia; C. P. Alling, Bradford, Pa.; F. D. Ormes, Jamestown.

Minnesota Homœopathic Medical Society.

Drs. H. M. Paine, Albany; D. F. Bishop, Lockport; Geo. Allen, Waterville.

Rhode Island Homœopathic Medical Society.

Drs. T. F. Smith, New York; Wm. Scherzer, New York; Arthur T. Hills, New York.

Vermont Homœopathic Medical Society.

Drs. N. B. Covert, Geneva; C. A. Beldin, Jamaica; Geo. B. Palmer, East Hamilton.

Wisconsin Homœopathic Medical Society.

Drs. M. O. Terry, Utica; A. J. Brewster, Syracuse; F. E. Robinson, Brooklyn.

State Dental Society.

Dr. J. W. Cox, Albany.

Dr. Paine presented the revised report of the committee to whom was referred the application for admission by the Tompkins County Medical Society, recommending that the application be received and the delegates be accorded all the privileges of members of the Society. The report was received.

Dr. Coburn moved that the report be laid upon the table. [Lost.]

Dr. Frantz: It is no more than right that the gentleman should be received if he is entitled to representation here. The credential of the Secretary states that he represents the Tompkins County Homœopathic Medical Society, and I claim he has a right to be admitted.

The President: How many physicians are there in the society?

Dr. Morgan: There are ten or twelve homœopathic physicians.

The President: As at least five homœopathic physicians belong to it that is sufficient to constitute a homœopathic medical society, and Dr. Morgan is entitled to admission.

Dr. Boocock: Dr. Morgan told me last evening emphatically that it was not a homœopathic society.

Dr. Morgan: I had a little conversation last evening with the gentlemen who has last spoken, and I said it was the Medical Society of the County of Tompkins, and admitted all duly qualified physicians, who stated their belief in the law of similia. It has been said that we were exclusive and I said we were not, but we believed in homœopathy and were willing to receive those who avowed a similar belief. I consider that to be the position of the State Society, and I believe that a homœopathist is one who believes in Hahnemann, but will use any other remedies that his conscience and experience dictate.

The report was then adopted and Dr. Morgan took his seat in the Society.

Dr. Jones: The auditing committee would report that they have examined the accounts of the Treasurer and find them correct. The report was adopted.

The President: Dr. Talcott, will you be prepared to make a report on the matter of Dr. Guy this morning?

Dr. Talcott: I have not seen any of the other members of the committee. It is hardly proper for me to make a report in their absence, and I wish further time.

Dr. Hasbrouck: I move that the matter which was referred to the committee relating to Dr. Guy, be taken from the committee's hands and the matter dropped by this Society. Dr. Guy appealed to this Society

because he was expelled from Kings County Medical Society, for a violation of the code of ethics. It is the same code which governs this Society and the American Institute. He was practicing a specialty, and distributing books through the city, stating the merits of Compound Oxygen gas, stating that it would cure diseases which are incurable. A charge was made against him and he plead guilty and was excused on a promise to withdraw from it. He did not withdraw from it and was cited again to appear, and failed, and the Society took action and expelled him. He appealed to the court and we followed him there, and got a decision in our favor, and now he comes here. I do not think it would be any injustice to him to drop the matter, but it is an insult to this Society and to the Kings County Society, that Dr. Guy does not think it proper to follow it up and have it settled.

Dr. Talcott: I have collected all the testimony, that I have been able, and have a mass of it which I am perfectly willing to turn over to any other committee, or put on the table or under the table, whichever is the proper place for it. I cannot forecast any result, because I have had no opportunity to consult with any of the other members of the committee. It does not seem to me it will work any injustice to Kings County Society or to Dr. Guy, to let it stand over another year, and as the resolution placing it in the hands of the committee authorizes them to report at some future time, I will say the committee have made no report yet, and have not had time to get their report ready.

The matter was then dropped.

Dr. Paine presented the report of the committee appointed to nominate Censors, as follows:

CENSORS.

Northern District.—Drs. A. W. Holden, G. W. Little and L. A. Clark.

Southern District.—Drs. W. M. L. Fiske, J. H. Demarest and C. M. Lawrence.

Middle District.—Drs. C. E. Swift, M. O. Terry and Geo. B. Palmer.

Western District.—Drs. W. B. Kenyon, E. H. Hurd and B. F. Williamson.

The report was adopted.

Semi-Annual Meeting.

Dr. Hollett invited the Society to Watkins Glen, for the Semi-Annual Meeting. The invitation was accepted and the first Tuesday in September was fixed for the time.

Clinical Medicine.

The President: The first thing in order is the Bureau of Clinical Medicine and the discussion of the papers read yesterday. If there is no discussion, I will declare the bureau closed.

Dr. Waldo: I move that Dr. A. R. Wright, be elected Chairman of the bureau for the ensuing year. [Adopted.]

Miscellaneous.

Dr. Paine gave notice that he would offer a resolution at the next annual meeting providing for a change of the by-laws by which the annual

dues of all permanent members after a membership of twenty-five years, be remitted.

Dr. Paine: I move that, in addition to the list of officers to be published in the forthcoming volume of transactions, there be added a list of the honorary members, and those who have received the honorary degree of Doctor of Medicine, from the Board of Regents, upon recommendation of this Society. [Adopted.]

Dr. Paine: I have a card from Dr. Hughes, of England, stating that he lacks volumes twelve and fourteen of our transactions. I move that the Treasurer furnish the volumes.

Dr. Waldo: These transactions are in the hands of the Treasurer who has them for sale, and I do not see why we should send them to Dr. Hughes, any more than to any other practitioner. He can buy them for a dollar or two.

Dr. Coburn: We have been in the habit of sending out transactions to all the editors of the journals, and I think they were sent to him in England. It is a matter of dollars and cents to the Society. [The motion was put and adopted.]

Dr. Paine: I move that the committees of the State and County Societies on Hygiene and Climatology, Vital Statistics, Prevailing Diseases and kindred subjects, be invited to present reports, and communicate with the State Board of Health. [The motion was adopted.]

Dr. Jones: There has been a bill presented to the auditing committee for advertising the annual meeting for three years, and the Secretary and Treasurer state that they did not order the work to be done, and as the Society does not get any benefit from it, we do not feel disposed to audit it.

Dr. Paine explained that he had ordered the work to be done for the convenience of members of the Society, as a large number of them would not know when the annual meeting took place, but for such notice, and it was copied into many of the local papers.

The secretary said it had been his custom to send to the papers of the State, a notice of the meeting about a week before it took place, and they had made a note of it, but he did not think they cut it from the Albany papers.

Dr. Boocock moved that the Auditing Committee be instructed to audit the account. [The motion was carried.]

Dr. Paine: I move that the motion for the non-acceptance of the minority report of the committee on the Milwaukee test, which was adopted at the last annual meeting, be reconsidered.

Dr. Jones: I move to lay the resolution on the table. [Adopted.]

Dr. Paine: I offer the following resolution: "*Resolved*, That there be established a department of Dynamic Medicine, the members of which shall be annually appointed the same as other bureaus, to which shall be referred all cases of alleged cures by attenuations higher than the twelfth potency."

Dr. Boocock seconded the motion.

Dr. Jones: I move that it lie on the table.

Dr. Brown seconded the motion of Dr. Jones, which was put and carried.

The President: The next business is the Bureau of Pædology.

The secretary reported that he had but one paper, by Dr. T. C. Duncan, which was read by title and the bureau was closed.

Dr. C. M. Conant was appointed chairman of the bureau for the ensuing year.

The President: In regard to the Bureau of Surgery, the committee have named Dr. W. M. L. Fiske, of Brooklyn, as chairman of the bureau.

On motion that appointment was made.

The President: Dr. C. E. Jones, Chairman of the Department of Laryngology, is present and desires to read a paper.

Dr. Jones: I have simply a report of a case presented by myself, with the remarks thereupon, and I have received no other paper. [Paper read.]

The bureau was then closed and Dr. C. E. Beebe of New York was appointed chairman for the ensuing year.

The President: The next business in order is the report of the bureau of Obstetrics. The Secretary reported that he had received one paper from Dr. R. C. Moffatt, entitled "A Case of Post Partum Eclampsia, with Favorable Results," which was read by title, and the bureau closed.

Dr. A. B. Rice was appointed Chairman for the ensuing year.

The President said the next bureau was the Bureau of Gynæcology.

Dr. Howland: I have had some correspondence but have had no assistance from any member of the bureau. What I had most in my mind is this: I believe that the influence of the parent on the unborn child is very great, and until fathers and mothers are willing to subordinate everything for the benefit of unborn children, we shall have more idiots than we have had in the past. I have no papers, Dr. Boocock has a few thoughts with reference to hysteria, which he wishes to present.

Dr. Boocock read his paper after which the bureau was closed and Dr. Alice B. Campbell, was appointed Chairman of the bureau for the ensuing year.

Dr. Bacon: I notice in a brief report of the action of the old school society that a committee was appointed to wait upon the Legislature to ask a change in the law of 1872, which was a law authorizing the Regents of the University to appoint State Boards of Examiners in Medicine, and to issue a State Degree to those who passed the examination of these Boards. Through the kindness of Dr. Paine, I was introduced to the President of the old school society, and had a talk with him on the subject, and he directed my attention to the latter part of the third clause which directs that examinations shall be held by the Board of Examiners on certain subjects. They wish to have that law altered so that the board should examine only on allopathic therapeutics, and it is unnecessary for me to say that it is not for our interest or that of medical science that any such change should be made. I move that the matter be referred to the committee on Legislation with power to memorialize the Legislature on the subject, if need be. [The motion was adopted.]

The President: The next business before the Society is the report of the Bureau of Climatology.

Papers were read from Dr. J. J. Mitchell and Dr. E. Hasbrouck, after which the bureau was closed and Dr. C. A. Belding of Jamaica, was appointed Chairman for the ensuing year.

The next business in order is the report of the Bureau of Ophthalmology.

Dr. Hasbrouck: I wish to say that I have attended pretty regularly the meetings of the State Society for the last ten years, and this is the most unsatisfactory I ever attended. It is the smallest in attendance, and those who came to attend it, do not attend. We have no discussion on any of the papers, and it is my honest belief that if one or two meetings more are held like this, this Society will not be worth the snap of a finger. In reference to the President's address and Dr. Talcott's paper read last evening, it was a shame that more of those who come to Albany did not attend it. It was an insult to the President and to Dr. Talcott.

Dr. Paine: This being the annual meeting, is the business meeting of the Society. In case any matter should arise requiring Legislative interferance or assistance, it can be had much more effectively than at any other time. It is not expected that physicians will give as much time to this meeting as they do to the semi-annual. I am sorry that so few members are here.

Dr. Hasbrouck: Admitting that this is the business session, the members should be here to attend to it. There has not even been a majority of those in the city present, and the only suggestion I have to make is, that if this thing continues we shall have no State Society to go to.

Dr. C. D. Hale: This is my first attendance upon the State Society. I have desired to become a member of the Society for some years, but have been unable to do so for several reasons. Coming from the county of Onondaga, where we have a society of thirty-two members, it was stated to me that if I attended the meeting of the State Society, I should find it very unsatisfactory. I am very sorry that I shall have to carry an unfavorable report back, as it will hurt the work of Homœopathy in the county. I hoped I might have something to report which would encourage us to go forward and work for the interest of the State Society, and prepare papers and become interested in the work. Personally, I shall do the best in this direction, that I can, but I rather expected there would have been others here who would have given me information.

Dr. Dayfoot: I always considered this more of a business meeting than one for the discussion of papers and of subjects pertaining to medicine, but I may be wrong in that. I understand the New York Society holds its meeting to-night and that together with the weather may account for the slimness of the meeting.

Dr. Paine: From the Recording Secretary's report we have a higher standard of papers this year, than heretofore.

Dr. Boocock: I heard from several physicians that Dr. Dowling's lecture yesterday on certain diseases of the heart, was the best ever presented to the State Society, and was worth all the trouble and expense of coming from home to hear it, and I am sure none of us can feel anything but highly gratified at the addresses of the President and Dr. Talcott, last evening. The material provided for us has been of a high order and this has been an excellent meeting of the Society.

Dr. Hasbrouck: I said nothing about the material; that is all right. What I said was about the number that came here to receive it.

There being no papers, the Bureau of Ophthalmology was closed and Dr. Boynton, was appointed Chairman for the ensuing year.

The President: The next business is the report of the Bureau of Otology. As there are no papers, the bureau will be declared closed.

Dr. F. Park Lewis was appointed Chairman for the ensuing year.

The President: The next business is the report of the Bureau of Histology, and as there are no papers that Bureau will be declared closed.

Dr. C. E. Jones was appointed Chairman for the ensuing year.

The President; The next business is the report of the Bureau of Vital Statistics, but as there are no papers, the bureau will be declared closed.

Dr. A. P. Williamson was appointed Chairman of the bureau.

The President: The next business is the report of the Bureau of Vaccination, and there are no papers in that bureau.

Dr. Paine: I move that the by-laws be changed and that Bureau abolished. [Adopted.]

The President: The next business is the report of the Committee on Medical Education. Dr. John F. Gray has reported the form of an act in relation to the appointment of a State Board of examiners, to grant licenses to practice to all persons practicing in the State of New York, that is, diplomas from all Medical Colleges of the State, shall be superceeded and given in charge of the State Board, and they only shall decide who shall have diplomas.

Dr. Waldo reread the report of Dr. Gray.

Dr. Bacon: The tendency in the profession generally seems to be to recognize the necessity of our having some other license to practice issued to new practioners, than that which is given by the Colleges alone. I suppose I am not saying anything new to anybody, when I remind you that in Europe no man is entitled to practice until he has been authorized to do so by some examining board appointed by the government. The college gives the diploma and degree of M. D., but the State gives the authority to practice medicine. It has been a hobby, you may say with Dr. Gray, for a great many years and a thing to which he has given a great deal of time and labor to try to bring about the appointment of such a State Board of Examiners. In other words in our state the license to practice should come from the state authorities and not from the colleges. If such a law were passed it would be a matter which the regents of the University would regulate. They could easily organize a State Board of Examiners under which and by which these examinations should be had. The difficulty in regard to the license to practice medicine in our State has grown gradually, and it has been simplified by the law of last winter. A young man applied to the New York County Medical Society, two or three weeks ago for a license to practice. He was a student, and had not yet obtained a diploma. The censors claimed they had a right to give the man a license and gave him one, and it was recorded by the County Clerk. I believe that the object of Dr. Gray is a good one, and that the bill making it imperative that all new practitioners should be examined by the State Board, should come from the Homœopathic State Society first.

Dr. Hasbrouck: While I believe in the spirit of Dr. Gray's bill, I think the suggestion of Dr. Dowling is better. If we are to have a license to practice to come from any Board let us have it for the whole nation, and be passed by Congress at Washington, and if this Society proposes

to take action of that kind I hope they will memorialize Congress at Washington.

Dr. Bacon: We might just as well memorialize the Higher Powers, for Congress has no legal authority in the matter.

Dr. Paine: It is understood that if a law of this kind goes into effect, colleges will grant a diploma, certifying that their students have passed through a certain course of study, and after that the students are to apply to a State Board independent of the teaching interest for a license to practice.

The President: The beneficial effect which would arise from the passage of this bill has not been touched upon. It prevents the graduation of students by colleges which are not qualified and have no means of teaching, and we know there are one or more such colleges in this State that are in the habit of graduating students who could not pass the examination of any County Medical Society in this State. This bill would defeat the action of such colleges. Under the present law a college can be established, as many of you know, under the act for the establishment of benevolent institutions, without any professors, or capital, or anything but a figure head they call a dean. If any of those colleges send out in the future such practitioners, they will have to pass a State Board of examiners or be thrown out as not qualified to practice.

The report was then adopted by the Society, after which a paper by Dr. Cropper, of Cincinnati, on "Medical Colleges and Medical Education," was read by title, and the bureau closed. The chairman of last year was continued.

The President: As retiring President of this Society I would say that I extremely regret that occasion has arisen for the remarks which were called out by the members a short time ago, in effect that this meeting has not been as interesting as those held heretofore. I have certainly been much interested and have endeavored to make this session as interesting as it is possible for me to do. I look upon it very much as Dr. Paine has done, that it was mostly a meeting for business, and thought there might be a lively and interesting discussion called out by the papers. I do not see why the members decline to talk, but it has occurred to me that there is one point you have overlooked, and that is, that at our best meetings for the last few years, there have always been some particular subjects which caused a great deal of excitement. For instance, the Fowler resolutions brought out a good many for discussion and a great many members of the Society said they were going to be here to see what would be done. There has generally been something of particular interest to bring members here which has not existed this year, and many stayed away, doubtless, because they knew there would be nothing but routine business to be transacted and papers to be read.

Dr. Hasbrouck: I hope the President will not construe any remark I have made, as indicating there was a want of capacity on the part of the President. I know the President has done his duty, but I say we have not done our best with the material at our hands.

The President: The object to be accomplished is a larger discussion of the papers that are read. There has been plenty of material but no discussion. The idea was that there would be considerable business to be

transacted, and the object seemed to be to get through with the business as rapidly as possible and read as many papers as possible.

Dr. Hasbrouck: I move a special vote of thanks to Dr. Waldo, for the able manner in which he has performed the duties of Recording Secretary for the past two years. [Adopted unanimously.]

Dr. Paine: I would suggest that at the next annual meeting the Secretary with one or two other members, be constituted a business committee, to which should be referred the papers presented, and that they should select the best papers to be read, after which all the subjects should remain open for discussion, until the close of the session.

Dr. Hasbrouck: I think the matter should be called to the special attention of the executive committee and I move that that committee be requested to take special cognizance of the suggestion of Dr. Paine. [The motion was put and adopted.]

After a cordial vote of thanks to the President, to the Common Council for the use of the hall, and to the newspapers, the Society adjourned.

H. L. WALDO,
Recording Secretary.

V.

Annual Address by Asa S. Couch, M. D., Fredonia, President of the Society, delivered in the Assembly Chamber, February 10th, 1880.

Heredity and the Higher Duties of the Profession.

Ladies and Gentlemen:

Heredity as a factor, in health and disease, has received too little consideration at the hands of medical men. The changes have been rung upon "Similia Similibus Curantur" as a law of cure, until professional gentlemen have almost forgotten their manners, in discussing the somewhat hackneyed theme, but the more important laws of prevention have received comparatively little attention. To the judical mind, this is unworthy and unwise. The promulgation of a new discovery affecting therapeutics and of the facts which shall establish its rank and importance, is both excellent and proper, but good judges will probably decide that narrow views are inconsistent with a liberal profession and that repeated and offensive declarations of them, as evidence of such superiority, are inconsistent with cultivated taste.

However disagreeable this may prove to those who have sought to force conviction by controversial tactics, all will agree that any new method of illustrating the truth of the law of cure will be a desirable change.

It is possible that this may be done by turning attention to other laws, which afford comparison and contrast.

There is a universal natural law—the almost exact antithesis of that enunciated by Hahnemann, and which some one of our writers has em-

bodied in the phrase—"Similia Similibus Generantur." A thorough and exhaustive contrast of this law—"like begets like"—with that upon which our school is founded—"like cures like"—will disclose the two leading agencies in natural development. The antithesis of their expression is not more striking than that of their operation. They stand in the relation of force and counter-force; of progression and obstruction; of builder and trimmer; of cause and cure and from their operations proceed the extremes of those relative terms—good and evil. But some deny the existence of one—some of the other—and many of both of these laws. It is not the intention, in this address, to advance any proofs of the law that "like cures like," except such as may flow from incidental inferences derived from a discussion of its counterpart—"like begets like." It ought to be unnecessary, at this day, to advance facts in support of the latter, in any body of medical men. But, unfortunately, some minds are not yet illumined by evidence, while other are tangled by the contradictions of bigotry and science. It has been truly said that "the whole subject is wonderful," and that "it is hardly possible within a moderate compass, to impress upon the minds of those who have not attended to it, the full conviction of its force." In case of those who would pursue the subject farther than it is possible now to do, reference is made to the works of Miles, of Gatton, of Ribot and of Lucas, to whose compilations, I am indebted for the majority of facts here embodied. Premising that their rehearsal will be somewhat dry and tedious, I nevertheless invite your close attention to their consideration.

The laws of heredity are operative in both of the so-called animal and vegetable kingdoms. Indeed, the evidences in their favor are, perhaps, most cumulative and striking, in the lower developments of animate and intelligent nature. The reason for this is grounded in the fact that increasing diversity multiplies the influences which, as force and counter-force, modify or destroy one another, with the result of *obscuring the relations between cause and effect.*

But as an exposition of heredity, in its broadest scope, would require volumes rather than the few pages of an address wherein it is only employed to emphasize the principal theme, what may now be set forth will simply consist of a few detached facts, drawn from the general field, in the hope of establishing a conviction of the unversality of its laws as a basis of judgment, in determining *the higher duties of our profession.*

Aesthetic criticism will doubtless decide that some of the facts adduced might better have been omitted from a professional address to a mixed audience but as *they are facts* and as they present the alternative either of a belief in the laws referred to or of capriciousness in the first great cause, I offer no apology for their introduction.

Turning to the vegetable kingdom, we find the evidences in favor of the laws of heredity numerous and conclusive. Take, for example, the department of Pomology. The best botanists refer each of our common fruits to from one to five original stocks, whereas the report of the American Pomological Society for 1877, catalogues as worthy of preservation and propogation, 107 varieties of peaches; 72 of plums; 37 of cherries; 115 of pears and 322 of apples. These do not include a tithe of the number which has been produced by accident and which are constantly being de-

veloped by design, in this country alone—in the world it is practically indeterminate. But the numbers enumerated are sufficient for my point, which is that, all these varieties were either special creations or that modifications from soil, climate and culture have been conserved and perpetuated, by and through activities represented in their respective germs.

If the latter proposition is granted, consistency will require the admission that, the improved varieties, not only in this, but in the departments of agriculture and floriculture have, in the largest measure, been due to the laws of inheritance. As this will cover the the whole ground in the vegetable, we turn to the animal kingdom for additional evidence favoring those laws, but where, for want of time, it must, (unfortunately), be confined to the mammalia.

In this department, we shall find the results of heredity represented in all the phases of physical and psychical development. In addition, a plentiful number of cases is recorded, which demonstrate that even physical injuries are not infrequently transmitted. Pardon the mention, but Dr. Lucas reports the curious case of a cow which, having lost a horn from accident, with consequent suppuration, produced three of her kind which were hornless on the same side of the head.* Dr. Eugene Dupue cut the vaso-motor nerve connected with the carotid artery of a guinea pig and as a result the eye, on the mutilated side, became permanently smaller and the ear thicker and larger; and these peculiarities were transmitted through five generations.† Brown Sequard found, by experiment on the same species, that cutting the sciatic nerve was followed by a destruction of the outer part of the foot, leaving but the inner toe on the injured side and this peculiarity was permanently transmitted. He also found that a certain injury to the spinal cord produced a change of sensation over a well defined area of the face and neck, and that a slight pinching of the skin would throw the animals into a kind of epileptic convulsion. The young, of the animals thus operated on, were born apparently healthy, but at the age of two or three months, they gradually became affected with epilepsy and the same area of face and neck passed through the same series of changes, in the development and cure of the affection, which had been observed in their parents. The most striking observation connected with these and several other animals operated upon was the entire absence of perceptible lesion in the nerves of the young, corresponding to those where the original operations were performed on the parents; notwithstanding which the remote results of the injuries were perfectly transmitted through several generations. §Blumenback records the case of a man who had the little finger on his right hand almost cut off and which, in consequence, grew crooked, and his sons had the same finger on the same hand similarly crooked. ||Sedgwick that of a soldier who, fifteen years before marriage, lost his left eye from purulent ophthalmia and his two sons were micro-ophthalmic on the same side. So, too, deviations of structure, of unknown origin, have been too frequently and permanently transmitted to admit of their being accounted for by accident. ¶Col. Hallane describes a race of two legged.swine—the hinder parts entirely wanting—and the deficiency was permanent for

*Popular Science Monthly. †Loc. Cit. §Darwin. ||Br. Med. Chirurg Rev. ¶Darwin.

three generations. Anderson, the case of a rabbit having only one ear and from this animal sprang a variety which steadily produced one-eared rabbits. Of polydactylism there are numerous records, but the most striking is that by Dr. Struthers, running through four generations. In the first generation an additional digit appeared on one hand; in the second, an extra finger was present upon both hands; in the third generation, three brothers had both hands and one of them a foot affected; and in the fourth generasion, all four extremeties were fortified by an additional member. Sedgwick reports of Lambert, "the porcupine man," whose skin was thickly covered with warty projections which were regularly moulted that, the pleasant peculiarity was transmitted through four generations. A Siamese family, for three generations, had the face covered with long hair accompanied by deficient teeth. An English family, for many generations had a single lock, differently colored from the rest of the hair. A Celtic family had a small white lock, in the midst of dark hair, for three generations.

In inferior animals, the inheritance of qualities is almost specific. By proper care varieties have been developed, which afford nearly or quite every respective quality desired. The Herefords, Devons and Durhams, illustrate this in neat cattle and the Messengers, Lexingtons and Hamiltonians, in horses. Any analysis of the qualities perfected through heredity, and represented in these different breeds of animals, will not be expected, but I may be permitted to emphasize the point aimed at, in their mention, by quoting from an eminent English authority that "the pedigree of a race-horse is of more value than his appearance in judging of his probable success." This is fully corroborated by the history of turf matters in this country where, of all the horses which have achieved the most brilliant records, only one is of boubtful or undistinguished ancestry. But if desirable qualities can be fostered in inferior animals so, too, instincts can be gradually changed through heredity. It is conceded that original instincts are the subjects of inheritance. * "Such instincts are illogical intelligences; they imply no comparison, judgment or choice; their operations while seeming to be directed by thought, never arrive at thought, as we understand the term. The duckling—no matter how hatched—makes straight for the water; the squirrel, without any knowledge of winter, lays up a store of nuts; the bird, hatched in a cage, upon obtaining its freedom, builds a nest of the same material and of the same shape as that builded by its ancestors."

It is readily understood and granted that these peculiarities *must* be transmitted, but the *fact and manner of the transmission of modified instincts*, better illustrates my theme. Instinct is certainly not as pliant an instrument as logical intelligence, yet it is capable of change when subject to strong and lasting influences.

I can make but the most slender reference to this branch of the inquiry. Take, for example, the domestication of wild animals. It requires several generations to achieve the desired result. The animal may be sooner modified and subjected to man's will, but in the progeny, there will, for years, be a silent conflict of heredities, which will render the result un-

*Ribot.

certain, if the training is intermittent or unmethodical. But whether the subject becomes domesticated or reverts to the state of nature, it *will be through an assertion of heredity.* There is, however, an important difference between the transmission of acquired modifications and of unchanged natural instincts—the one admits of no exceptions, the other of many; which only proves that the victory over nature, to all outward appearance complete, *had not suppressed the power of original influences, acting through the germ,* and thus "the exception proves the rule."

Indeed these exceptions furnish the key for unlocking the mystery of reversions in man, whose ancestry is inconceivably remote, and in whose case the number of modifying influences has been simply incalculable.

Passing over what might be said in relation to the inheritance of peculiarities connected with the special senses in man; let us, for a moment, examine a very few of the evidences adduced by Galton, in favor of hereditary genius or of special mental excellence.

From the accession of Charles II. to the year 1864 there were, including the Lord Chancellors—thirty in number—two hundred and eighty-six judges in England. Out of this number, more than one in every nine, was either father, son or brother to another judge. This does not include other eminent relations such as bishops, archbishops, poets, novelists, physicians, admirals and generals, which were numerous. Of the Lord Chancellors, no less than twenty-four, or eighty per cent. of the whole number, had eminent relations. In each of forty-six families of these jurists, there were from three to five or more eminent persons. Of statesmen, of the reign of George III., out of fifty-three persons thirty-three find a place in his dictionary of kinship, and of the twenty-five premiers, since the accession of that monarch to the date of examination, seventeen are classified as eminent kinsmen. Of commanders, he sets forth the genealogy of twenty-two families, sufficiently to show that there were in each from three to six distinguished relatives. Of great literary men more than one-half had kinsmen of high ability. Of scientific men there were in twenty-nine families from three to six of surpassing mental power. Concerning the great Poets, he concludes, after much research, that over forty per cent. had eminently gifted relations; that in each of the families of eleven of the old masters in painting, there were from two to six distinguished kinsmen; and in connection with the great musicians occurs the most remarkable instance of mental heredity known to history. The family of Sebastian Bach, begun in 1550 and continued through eight generations. During two hundred years it produced a *multitude of artists of the very first rank.* In this family, are reckoned twenty-nine of the *eminent* musicians of history, and Fetis, in his Dictionaire Biographique, —a sufficient proof of distinguished character—mentions fifty-seven of its members.

Thus, as in illustrating the laws of heredity, we find the wonderful family of Bach in music, so in art, we may point to those of Titian, Murillo and Bassano; in poetry to Aistophanes, Corneillo and Coleridge; in science of Bacon, Boyle and Darwin; in literature of Hallam, Macauley and Sidney; in war of Alexander, Gustavus Adolphus and Maurice of Nassau; in diplomacy of Fox, Granville and Adams and in law to those of Hyde, Littleton and Montague. As each of these are distin-

guished names, in their several departments, so the families of each were truly remarkable for the tenacity with which genius clung to their several lines.

It would be a work of supererogation, in a society like this, to advance any evidences in favor of heredity, as manifested in disease. Not only is the history of our art replete with testimony to the truth of its laws, but the life of each of its observing practitioners is, day by day, filling up with irrefragable testimony, to their silent but monarchical rule. It is in this connection, that the laity require but little information in relation to the subject. They have learned, by sad experiences, to dread the influence of a diseased ancestry and to admit that the exemplification of the power of inheritance is not over-drawn, in the second commandment of the decalogue. But aside from this, they have a powerful illustration of the truth of its laws in the vigilance with which the diseases of generations are ferreted out by those who would insure human life. In this day there is nothing so sensitive as capital. The world is figuratively seeking the philosopher's stone. It would turn everything into gold. Hence the judgment, based upon the effects of heredity, which makes capital shrink from a tainted life is of more value in their behalf than the desultory testimony from all other sources.

But your patience will permit no further reference to the facts in favor of this great law of nature. The number advanced is fractional compared with that collated by different authorities, and the whole number is as nothing, to what might be assembled, if the profession, as a body, would engage in the work. It is safe to affirm that every physician, with an attention diverted to the subject, could add numbers of cases to the already comprehensive store illustrating heredity.

The cumulative testimony thus obtained would soon overwhelm and silence all objectors. But some, even among its strongest advocates, weaken its claims by unfortunate and illconsidered admissions. For example, Dr. Lucas, the most elaborate author upon the subject, concedes that spontaniety is a co-worker with heredity. This is both weak and inexplicable. While tending to invalidate much, if not all, of the testimony which he has so laboriously accumulated, it is calculated to weaken his logic if not to excite distrust of his animus. If facts are insufficient to account for increasing varieties on a basis of law, it were wiser, if not more logical, to refer them at once to specific creation. Spontaniety means nothing but caprice or chance. The one is wholly inconsistent with any law whatever; the other with the character of any possible Creator.

But every reproduction, whether in the animal or vegetable world, can be accounted for by law, and is admitted to be only a new form from old matter. In animals which consist of a single cell and which multiply by simple division, "propogation is nothing but a growth of the organism beyond its own individual limit of size." * "When such a little globule, for example a protamœba or a protogenes has attained a certain size, by the assimilation of foreign albuminous matter, it simply falls into two pieces and each half becomes an independent individual, to commence anew the vital phenomena of nutrition and propogation." Every new vital form results

*Halckel.

in the same way or from some greater or lesser modification of the plan through sexuality. The lower organisms are without sex, the higher frequently unite two sexes in an individual, and the highest assign them to two representatives of the species. In the former, it is an easy task, both to account for the results of inheritance and the dreary lack of variety, for each succeeding organism is the half of its progenitor, and the only reason why it is not as simple, in the latter, is because of the *increasing complexity of modifying and annulling circumstances.* The inception and development is as comprehensible in the one case as in the other. All, in the beginning, are instances of cell aggregation from existant, external matter, and in the end are examples of simplicity or complexity, having steadfast or varying phenomena, according to the methods of and influences exerted through their reproduction. In the higher orders of animals, the number of circumstances which may alter results is simply immense. To illustrate, and not by way of proper comparison, consider the number of changes that may be wrought with a given number of fixed factors. With a pack of playing cards, for example, it is said the chances of duplicating any combination extends into the millions. But the proteine compounds, of living cells, are not such factors. They are subject to existing and pre-existing influences. These include whatever made or marred the ancestry and those, whatever, in the present, can effect the mind, body or estate. They reside in the simple elements of life—air, water, food—and the manifold influences of human society, *with their numberless combinations through all the ages of history.* Mathematical ability is far too limited to compute them and the mind much too feeble to comprehend them. In this view, variety, as rspresented in man, *should be an evidence in favor of, rather than against heredity.* The law is not invalidated because certain forms and peculiarities cannot be specifially referred back to the ancestry. In the crossing of influences represented in reproduction, it is reasonable to judge that the stronger will exert superior control. It has been irreverently said that, in war, "the Lord is on the side of the strongest batteries." However this may be, it appears to be the rule in nature that opposing forces either exactly antagonize and destroy each other, or that the stronger triumphs. Like electricities destroy one another; the meeting of two waves of light of equal vibration produces darkness; counter irritation, by reflex-action, allays original irritation, (an illustration of the law of similars). It is true that these are forces—equally true that protoplasm is not force. But matter and force, while they are not identical are inseperable—it requires both to constitute an individuality. In their joint operation resides the genesis of every germ and its latest reproduction presents the highest result of their combinations and antagonisms. In this way, alone, can there be advance or retrogression in nature. Modifications, from external influences *could never produce comulative results except for the law of heredity.*

If, then, we admit its existence as a universal, natural law; a law which is the immediate agent in the transmission of both good and evil to the future representatives of our race, what shall we decide to be *the higher duties of our profession?* Manifestly, first more vigilance in the department of preventing evil that there may be less necessity for combating it, and second an increased interest in demonstrating and promulgating the

truth of the law that religious and philanthropic bodies may not escape conviction and thus avoid, in any measure, their just responsibilities.

Thus far the advancement of mankind has proceeded from an inevitable combination of influences. The necessity for labor developed both body and mind. Increasing intelligence, rendered active by growing physical vigor, finally produced a necessary moral system.

That system embodies two forces—fear of punishment and hope of reward. No philosophic thinker could object to the program. It was a question of pushing and pulling to higher ground. "The end justified the means." But now, if in getting wisdom man has arrived at understanding, which Coleridge declares to be the highest of the faculties, he should, as far as practicable, *administer upon the destinies of his race, through the laws of heredity, in place of regulating them by obstruction, through fear or an impetus derived through low selfish impulses.* The one arrives at results by measures which retard the intellect, the other by those which develop and emancipate it from superstition. Better physical training; increased physiological knowledge; correcter hygiene; greater intellectual grasp and finer moral perceptions should be instituted, where either correction or cultivation is an objective point. No great and sudden revolution is prophesied or expected, but with a regime like this there would be ground for hope that brutal re-actions from an employment of the gallows; desperation and recklessness engendered by either patronizing or cursing the unfortunate; our questionable moralities from a cultivation of selfishness would sooner pass away and give full scope to the benign code of Him whose garment was without seam and whose life was without reproach. It is incumbent upon our profession so to appreciate and understand the laws of heredity that it can intelligently advise in this department, and so to elevate its dignity and its manners that its advice will not "fall upon the ground like water that cannot be gathered up." But turning to the more immediately practical if not more germane duties of the profession, we shall find that which shall give us pause.

As now organized, the medical army presents the dreary spectacle of an interminable but ineffectual fusilade against an ever conquering monarch. Its methods are only the modified methods of barbarism. It lessens few physical evils by prevention—administers little consolation by directing happier results. It attempts to stem torrents that it cannot overcome but neglects to diminish the sweep of the deluge. It obtains a simple stay of proceedings and babbles its own praise, but forgets to remove the cause of action and thereby earn the *merited* gratitude of men.

And yet, for its deeds it claims chivalric recognition and for its results romantic embodiment. The time is coming when this will be done away —when assumed dignity, mysterious affectation and gold spectacles will not prove the vestments of a hero nor constitute the inspiration of a song.

It is proper that peans should be sung to the praise of those who rush into "the imminent deadly breach" of an epidemic but imperishable monuments should be erected to those who abolish the causes of evil in the moral and physical world. It is fit that the great services of the profession in physiological and pathological investigation should be recognized, but, in a conflict with disease, until its greater work is to prevent and its lesser to cure—to destroy the germs of evil rather than to combat

the results of their developed strength; in a word, until it fully understands and rises to the dignity of *bequeathing cumulative benefactions to mankind in place of weakly administering upon his unfortunate legacies*, it must suffer the imputation that it has made no signal advance from the methods of Esculapius and Hypocrates. There is enough to inspire a radical change. The world groans under evils from which it should be emancipated. The task, in a large measure, belongs to the medical profession and neither humility nor arrogance should interfere with its engagement in the work. Look at our State. How many of its crowded villages and cities have competent sanitary supervision. But the neglected duties of our profession do not begin and end with the procurement of a pure atmosphere to breathe or of uncontaminated water to drink. Foods are alarmingly adulterated; wines viciously poisoned, and even the drugs administered to the sick are in far too many instances not what they represent. If the response comes that our statutes provide for the punishment of those who manufacture and vend these articles, the question is—who is to enforce these laws. The homely adage—"What is everybody's business is nobody's" has made them a dead letter.

But there are other matters that require the attention of the professon. The "patent medicine" business is one of the most gigantic evils of modern life. It is a cold blooded system of slow poisoning for money. It elevates lying to the dignity of a fine art and manslaughter to that of a counting house transaction. It holds high carnival in a field especially adapted for its successful operation, and boasts the protection of government. The people are ignorant of what is good for them here, but they have been impressively taught what may befall them hereafter. Hence, in superstitious fear they imagine themselves sick, and in unsuspicious folly they seek to be made better. Without any knowledge of disease or the action of drugs, they apply the unknown to the unknown with a child-like faith in the promises of the newspaper and the family almanac. Thus innocent infants are stupefied with disease engendering cordials—confiding consumptives beguiled by concealed anodynes and anxious hypochondriacs turned into confirmed dyspeptics by unknown compounds and bitters that are warranted to cure every ill to which flesh is heir. It is useless to enter upon any lengthened animadversion upon this subject or to attempt to follow this universal drugging through the avenues of heredity to its effects upon the race. It is sufficient to put upon record the unmistakable declaration that the system which fosters it is the sum of all negative villaines and the legislation which protects it, the maximum of all positive inconsistencies. What shall we say of a Government that creates a "National Board of Health" to prevent the entrance of disease from abroad and yet deliberately opens the flood-gates at home? Or of those that spend millions upon alms houses and asylums but fail to recognize the paramount causes of insanity and pauperism?

A similar inconsistency prevails in many of the great moral operations of the day. Take for example the intemperate crusades against intemperance. With, perhaps, a just conception of evils produced, there is a sad failure in intelligent comprehension of causes involved. It is a conviction with reflecting people that many appetites for strong drink are created by compounds which, under the name of "bitters," escape the payment of

license fees but which, owing to their large proportion of poorly rectified alcohol, produce all the vicious effects of drugged beverages. But the manufacturers of these villainous compounds grow rich—obtain high social distinction and not unfrequently are *elected to office by these frantic temperance people.* Now, if the people who take these bitters—excepting, of course, those who swallow their poison *for the sake of a dram and consistency*—were duly notified of combination and result as are those who obtain their bad liquors from unprincipled vendors, the case would not appear quite as bad, for under the Constitution there are "certain inalienable rights"—but they are not—they innocently drink to cure disease, what may cause a terrible misfortune; and so it is with the whole range of nostrums. The people are incapable of a proper discrimination. They believe what is promised and unhesitatingly swallow what is praised. For this reason, they should, as far as possible, *be protected by philanthropic legislation.* The statute ought to require that the name and nature of every drug, in nostrums offered for sale, be distinctly printed upon the package containing them. Beyond that, in this direction, it probably could not go. But it could cause the people to be properly educated in the premises, and so, at least, shift a grave responsibility. In every school nourished by its bounty, it could insist that the children be enlightened as to the terms "alterative," "anti-spasmodic," "anodyne" *et id genus omne*, and that mottoes from the masters *e. g.*, "Medicine has slain more lives than war, pestilence and famine combined," be thoroughly impressed upon their minds. In short the whole subject of medicines should be stripped of its pedantry and superstition and the people taught to dread drugs and possibly, even, to be doubtful about the doctors.

But take another of the evils which require to be dealt with. In this state an attempt has been made to regulate the practice of medicine and surgery upon the proper basis of professional acquirements.

To this end, it was enacted that any person who should practice either without a diploma from an incorporated medical college or a license from a legal medical society, might be adjudged guilty of a misdemeanor under increasing penalties. Now the intent of this law was correct. It was designed to protect both the profession and the public, and while there was a gloomy inconsistency in thus legislating against incompetent practitioners while allowing patent medicine manufacturers to have full scope, it was still a feeble attempt in the right direction. But it has sadly miscarried. It may be asserted that it has hightened the very evil it was intended to obviate, by creating *a kind of respectability for persons improperly licensed.* A medical society, in the western part of the State, has licensed a person to practice, who utterly *failed to answer a single question propounded by its board of censors!* Notwithstanding this malignant violation of its spirit, the law protects the practitioner and neither the profession nor the people have any immediate remedy.

Criminal laws are for the prevention and punishment of crime. If they miscarry there is no escape from responsibility after due notice of the result. Drugs, improperly taken, engender disease, and diseases through heredity, exert a mighty influence upon the future race. The manifest tendency among physicians of the old school is to diminish the amount of medicine administered. It is because experience has taught them that all

drugs which do not help are a hindrance to nature and that even enlightened judgments are extremely fallible in the matter of their administration. But the uncultured have no scruples because they have neither wisdom nor conscience.

They know nothing and consequently they fear nothing; or they dread nothing because educated to a contempt for law. They pander to the popular prejudice in favor of greater amounts for less money, and to a popular superstition that powerful effects emanate from brave and vigorous minds. But the light possible penalty of an almost impossible conviction for manslaughter which might, in a correct state of society, be occasionally visited upon these pretentious exhibitors of drugs, is utterly lost in the case of patent medicines. Their present evils and future effects, through heredity, will continue to be ascribed to the "fall of Adam" or the "visitation of God." This sort of weakness would seem to be out of place in an age which styles itself "enlightened" and in communities which call themselves "advanced."

In my judgment, the "mutual admiration" tendency of the times is rather nauseating in view of all the facts. It is of a piece with praising the great cathedral while perishing from odors, in Cologne.

But this mawkish gratulation is the order of the day. It extends through all classes of society and animates both the moral and secular world.

The State appropriates millions for and points with pride to its public works, but refuses a few hundreds for private protection. It digs canals, builds bridges and squanders upon Capitols, but the unostentatious work which shall, as far as possible, insure to its citizens physical, mental and moral health is almost wholly unprovided for or forgotten. The Bible declares that "all a man hath will he give for his life." This expresses a universal estimate of its value. But the operations of society are inconsistent with such an estimate. Otherwise the first duty—the most diligent occupation—the greatest expenditures would lie in its present protection and its future conservation. The actual state of things may be said to be almost exactly the reverse. The responsibility of this, in a large degree, rests upon the medical profession. It stands, or ought to stand, in the closest relations to the real wants and the greatest necessities of mankind. It knows, or ought to know, the results of a good and bad hygiene, and of fortunate or unfortunate inheritances. It occupies, or *ought to occupy*, the position of arbiter in all these matters, and has, or *ought to have*, the influence to subordinate *all other departments* to its will in their management. If it has no such influence and does not stand as such an arbiter, the fault is, in a measure, its own. It must fail of position, in proportion as it lacks dignity in methods. It cannot expect guarantees to administer for others until it can give guarantees for itself. It cannot do this *upon a maximum of personal consciousness and a minimum of common sense.* But its lack of influence must not be laid wholly at the door of the profession. It must be shared by the people and their legislating representatives.

What encouragement does it receive at their hands? How many of its colleges are endowed, and how many of its incorporated societies—

through which and by means of which it attempts to elevate its standard, are nourished from the public funds?

Look at the charity list of each succeeding Legislature. All in the interest of existing evils and not on behalf of aborting or wholly preventing them. All for the people—not one for the profession. Such are the provisions for hospitals and dispensaries, wherein physicians have the inestimable privilege of working for nothing or for a paltry compensation. If, in a spirit of wondrous generosity, societies are incorporated, they are given neither halls nor libraries but are left to the charities of landlords and municipalities for a place wherein to hold their conventions and to their own slim purses for the publication of their transactions. Who will deny that such a condition is anomalous? Ask a given over millionaire all that he has for a new lease of life and the transaction will not lie for discount. Or inquire of our legislators, what are the most important considerations affecting existence, and they will tell you—" mental and physical health," but they will not *intermit a single moment in legislating upon all subjects, from their salaries down to salt, to* give the profession which conserves them *due consideration.* Can this be helped? I do not know, but I cannot say I do not care. A properly sustained medical profession, would to-day be the greatest almoner of blessings in our State. (I use the adjective medical in a comprehensive—not a narrow sense.) It would be raised above the practice of low and contemptible methods. Its ability to search out causes would be increased and its wisdom in regulating them would be augmented. It may be asserted, by some, that it has *no clear conception of what would promote its welfare.* The answer is that it does not seek its own good apart from benefits to the public. But the latter cannot be administered until law provides an organization by which they may be conferred. The crying want in this State, *so far as the people are concerned,* is a vigorous Board of Health. Such a board should, at least, be given absolute jurisdiction over all that relates to the physical welfare of the people. It should be made its duty not only to see that *competent* under-boards are instituted in every village and city of the State, but to insist that they *fully discharge* the obligations imposed upon them of inspecting and remedying all matters which are opposed to the highest sanitary conditions. Whatever relates to water, air, food and all adulterations as effecting the public health, should be under their full control, subject only to constitutional limitations, and an appeal to the State Board.

The latter should also be given jurisdiction over the qualifications of medical practitioners and the traffic in patent medicines; having authority to inhibit the sale of every nostrum whose composition and drug action is not plainly engrossed upon each package, and to arrest the practice of persons improperly licensed or whose diplomas have been obtained from colleges which have evaded either the spirit or the letter of the law. During the prevalence of epidemics, it should have special powers, whereby disease might be limited in its ravages and lessened in its malignity. But a board competent to administer upon and execute duties as important as these, should be composed of scientific *professional* men. They should be qualified to make proper analyses, chemical and microscopic; should thoroughly understand the science of drainage and ventilation and be

fully conversant with the latest developments in the mycetic theory of disease. They should be persons of that large and varied professional experience which sharpens perception, and of sufficient age to place them beyond the errors of either an impulsive or an arrogant judgment. But a board composed of such men, and endowed with such powers, should not be expected to *labor without proper compensation.* Their operations would relate to vital interests of society, and therefore the whole subject should be managed upon sound business principles. They should be well paid and held to a strict accountability. Such a board should be non-sectarian in character, or at the very outset it would awaken popular clamor, if it did not engender sectional bitterness. Our Statutes recognize three schools of medicine in the State. Good taste forbids any discussion of their relative claims to public confidence and support. But having been accorded a legal status, it would appear that they should receive legal recognition in all departments, in proportion to the influence they represent.

A Legislature that should create a State Board of Health upon any other basis would be guilty of a glaring inconsistency. So, too, any of the schools which should insist that such a board should be made up wholly from its own membership, would subject itself to the judgment of undue selfishness if not to that of a brainless egotism. The homœopathic school does not occupy any such ground. Its platform is the broad one of a just recognition of the rights of all. It claims, and is able to establish, that the general standard of scholarship in its colleges and in the ranks of *its recognized practitioners* is not inferior to that of any of its compeers. It also asserts that the intelligence, social influence and taxable property represented by its patrons, in all places fully supplied with its legal practitioners, is not behind that of any other school. A due regard, therefore, for its own honor and the interests entrusted to its guardianship compels it to demand not less than a one-third representation upon the State Board of Health. It is not probable that this demand will be opposed in any influential quarter. But if it shall appear that our past experience in these matters is to be duplicated in the present or the future, I recommend that you take the subject into your dispassionate consideration, that without malice, you may "wisely judge and prudentially determine" your course in reference to a point so vital to our interests.

And now, one word in conclusion, and I will relieve your attenuated patience. I shall not be cast down by your decision that, the discussion of the theme chosen for my "Annual Address" has been faulty, incomplete and inconclusive. The circumstances—growing out of a multiplicity of varied engagements—which have, in a measure, conspired to render it so, it would be highly improper for me to discuss. But I may be permitted to declare that, the only purpose which has animated its preparation has been that of attempting to *demonstrate the necessity for work in our Society, other than the tedious exchange of unimportant personal opinions and the undignified tilt of personal controversy.*

If your future deliberations shall prove that I have, in any measure, succeeded, I shall be content to leave with those who may come after me the great work of leading this Society to the position which, by virtue of its organic principles and its public relations, it is justly entitled to occupy.

VI.

Annual Address Before the State Homœopathic Medical Society, February 8th, 1881, by the President, A. R. Wright, M. D., of Buffalo.

HEREDITARY EVILS.

The Care of the Helpless Dependents of the State.

Ladies and Gentlemen of the New York State Homœopathic Medical Society:

To discharge the duties of this hour in a manner that shall be of interest to you and profit to our Society is the desire of your President. A failure in this might be natural enough under the circumstances. On a similar occasion one year ago, this Society was treated with an eloquent and scientific address on the general subject of the heredity of the more desirable marks and characters of physical life and traits of the human faculties. I have chosen for discussion this evening a medico-legal aspect of the heredity of pauperism and crime (in co-existence) with inebriety, insanity and idiocy, as found in the dependent classes. I know the ex-President and the Society will pardon me for any appearance of a continuation of last year's subject when they see its scope, as we shall pass in review the darker and more repulsive side of human character. In our professional work, we see humanity generally in its more unfavorable aspect; its weakest and most helpless side turned toward us for improvement at our hands, through the skill and knowledge we have obtained. The subject of the treatment or care of the helpless dependents of the State you may think too undignified for discussion in your Society, and that it more properly belongs to some other body. But in the practice of every physician of moderate experience this unfortunate class is frequently brought under observation; hence physicians are generally consulted on the best means of caring for these helpless dependents. On one point in connection with them, I ask your thoughtful attention; that is, the heredity of pauperism and crime, and the usual co-existing diseases and conditions, viz.: alcoholism, insanity and idiocy. The general doctrine of heredity is so nearly universally accepted by scientists and professional men that we do not propose to discuss it here. Neither is it necessary, in a society of intelligent physicians, to produce any proof of the heredity of the diseases mentioned. You all recognize it in any critical study of the etiology of these diseases in your patients. Perhaps the heredity of alcoholism is not so readily accepted as the others, and we make room for the following references: Ribot* says: "The passion known as dipsomania or alcoholism is so frequently transmitted that all are agreed in considering heredity as the rule. Not, however, that the passion for drink is always transmitted in that identical form; for it often degenerates into mania, idiocy and hallucination." Gall speaks of a Russian family, in which the father and grandfather had died prematurely, the victims of this taste for strong drink. The grandson, at the age of five, manifested the same liking in the highest degree. "Trelat, in his work *Folie Suicide*, states that a

*Th. Ribot on Heredity, p. 85 et seq.

lady of regular life and economical habits, was subject to fits of uncontrollable dipsomania. Her mother and uncle had also been subject to dipsomania." Putzel* says: "There is no doubt that inebriety may be transmitted, and I have myself seen a few cases in which several examples were presented in the same family." Dr. Morel† says: "On examination of one hundred and fifty children of the commune, ranging from ten to seventeen years, this examination has confirmed me in my previous convictions as to the powerful effects produced by alcohol, not only in the individuals who use this detestable drink to exeess, but also in their descendents. On their depraved physiognomy is impressed the threefold stamp of physical, intellectual and moral degeneracy." For further proof on this point, consult Dr. Huss and Morel who have collected many facts bearing on the heredity of alcoholism. The medical literature of the present day abounds in proofs of the effects of alcoholism in producing insanity and idiocy. Austie§ says: "That the nervous enfeeblement produced in an ancestor by great excess in drink, is reproduced in his various descendants with the effect of producing insanity in one, epilepsy in another, neuralgia in a third, alcoholic excesses in a forth, and so on." Hess|| found in a Swedish asylum that half the insane men had been drunkards. Evidence more frightful even than this, of the ravages wrought by alcohol, is furnished by the effects of the removal of the *heavy tax* on alcoholic drinks in Norway. In eleven years (1825-36) the percentage of increase for the whole population was in mania, forty-one per cent; melancholia, sixty-nine per cent,, and dementia, twenty-five per cent. Worse even than this was the effect upon the rising generation, for *idiocy* increased one hundred and fifty per cent. That this increase was due to the augmented consumption of alcohol was shown by the inquiry made by Dahl, who found that out of one hundred and fifteen idiots, sixty per cent were the children of drunken fathers and mothers." But our purpose being at present to note particularly the existence and heredity of crime and pauperism in close connection with the disease named, we refer again to Morel, who traces the effects of intemperance in one family and sketches it as follows:

First Generation—Immorality, depravity, intemperance and sottishness.

Second Generation—Hereditary drunkenness, maniacal attacks, general paralysis.

Third Generation—Hypochondriac tendency, homicidal proclivities.

Fourth Generation—Intelligence hardly developed, stupidity leading to idiocy.

Despine in "Physiologic Naturelle" gives several casses of heredity of crime, one of which, the Jean Chrotien family, whose history for three generations we condense as follows: Though there were but sixteen persons in the three generations, ten were convicted of capital offences, six of which were murder. Dr. Despine observes the tendencies of such families of criminals to unite, thus conferring the hereditary transmission, also remarks, "The fact dsmonstrated by Ferrus and Lelut, that insanity is much more frequent among criminals than other persons, goes far to prove that crime and insanity are closely connected." Ribot says: "The

*P. on Nervous Diseases, p. 62. †Traite des Degenerecenses. §Reynolds Cyclopædia, Vol. 1, p. 675. ||Brain Work and Overwork, H. C. Wood.

number of criminals whose ancestors have given signs of insanity is very great." . . . Bruce Thompson, in his recent work on the hereditary nature of crime, adopts his conclusion and supports it by figures. He says: "On a close acquaintance with criminals of eighteen years standing, I consider that nine in ten are of inferior intellect, but that all are excessively cunning." To show the connection of PAUPERISM also with the diseases mentioned, we have for reference recent statistics from the very ground on which we would apply the remedy. In 1877 Dr. Charles S. Hoyt, Secretary of the State Board of Charities of New York, presented to the Legislature of the State a report relating to the "Causes of Pauperism." The statistics then compiled were carefully gathered by members of the Board and other intelligent men, from personal observation and inquiry into the condition and history of the inmates of each of the almshouses of the State. They noted the history and condition of each person, and also that of his family, living or dead, for three generations. But the obvious difficulty in obtaining such items from such sources, especialy in the large cities, would color the aggregate more favorably than the *real* facts would warrent. The names of Dr. Hoyt, President Anderson, of Rochester University, W. P. Letchworth, of Buffalo, Pruyn, of Albany, Roosevelt, of New York, are an assurance that this report presents the most reliable statistics we know of, on the subject under consideration. Some of these notes give sad family groups, as follows:

A man aged eighty-five years, with a son, feeble minded, forty-five years old, a daughter forty years of age, also feeble minded, and a grand son eleven years old, an idiot, born in the poor-horse; the first an inmate forty-five years, the second forty years, the third thirty-five years, and the fourth eleven years, making an aggregate of one hundred and twenty-six years spent by them in the institution, or nearly thirty-five per cent. of the time spent in the house by all of its other inmates, and it was said that several other members of the family had also been paupers. A man aged sixty and his wife aged thirty-nine years, and an illegitimate child of the latter five years old born in the poor-house; the woman with her mother, one brother and six sisters were formerly inmates of the poor-house of an adjoining county; after being discharged she married and soon lost her husband by death, since which time she has had three illegimate children, two of whom are dead; her present husband a pauper at the time of their marriage. A man and his wife, the former aged thirty-nine and the latter thirty-seven years, with three children and a grandchild, the parent said to be useful and the children intelligent; two brothers and a sister, aged respectively twenty-two, nineteen and sixteen years, all feeble-minded; the parents feeble-minded, and also five other of their children, a feeble-minded woman aged thirty-eight years and unmarried; admitted when twenty-three years old; father intemperate and mother died in the house, a pauper; has had two illegitimate children. An unmarried girl, eighteen years of age having two illegitimate children, the youngest of whom an infant, was born in the house; was early orphaned and entered the poor-house when only seven years of age, the mother a pauper, and she has had one brother and two sisters also paupers; is thoroughly debased and offers but little hope of reformation. A man seventy-two years of age, a widower, five years an inmate; is uneducated, very intemperate and has

been in jail for drunkenness; has had four deaf-mute children educated in the State institution, three of whom are now living, and provide for themselves. A weak-minded single woman, twenty-six years old, dependent from birth, the father, mother and two brothers having been paupers, and her child, a deaf-mute girl, six years old, born in the house. A single man, thirty-one years old twelve years an inmate, a paralytic, of intemperate parents, both of whom were paupers, and died in this house. A married woman twenty-six years of age, frequently in jail for intoxication, two years an inmate with a male child three years old, and an infant girl aged two months; led a vagrant life in childhood, the father, mother and four sisters being paupers; is debased and thoroughly degraded by sensual and immoral practices, and gives little promise of reformation. Two feeble-minded sisters, the elder aged twenty-one, and the younger fifteen years; the former an inmate of the home eighteen years, and the latter from birth; both maternal grandparents, as well as father, mother, and other near relatives, have been paupers, and most of them intemperate; the degeneracy of the family renders it probable that other dependents may spring from it unless stringent precautionary measures are adopted. In Kings county out of one thousand eight hundred and seventy inmates nine hundred and forty-two are sure to remain dependent for life.

The insane department of these institutions present similar pictures, as follows: Single woman, age twenty-one, two years insane, but has not been at any State asylum, is frequently violent, and is said then to require close supervision; maternal grandfather, father and mother and also one brother said to have been insane; and an unmarried women, forty years old, insane ten years and three years in the institution, was at the State asylum two years without improvement, father and other members of the family have also been insane. A married woman, twenty-six years of age, insane two years, during one of which, was under treatment at the State asylum; mother died insane, and a maternal uncle and aunt were insane; a woman thirty-five years old, married and abandoned by her husband; sixteen years insane, two of which were spent at the State asylum and the balance mostly at this house. An unmarried man twenty-five years old, insane three years, and treated first at the State asylum; the mother was feeble-minded and the maternal grandmother died insane; one maternal aunt bore two illegitimate children in the poorhouse, another with a child, was an inmate of the house six years, and another led a dissolute life and was also a pauper. A married woman, fifty-one years old and the mother of two children; was taken insane at the age of twenty-nine, spent two years at the State asylum and the balance of the time in this institution; father and mother were paupers, the latter dying insane. A man thirty years of age, single, and insane ten years was at the State asylum for a time without improvement, and is wholly dependent; the mother a pauper, and an idiot brother eighteen years old has been in the house since ten years old.

Similar cases might be repeated *ad libitum* from said report, but such details are not pleasant reading and we refer to schedule fifteen for more definite and instructive figures on the co-existence of pauperism and the diseases mentioned, showing by counties, the number of dependent insane, idiots and inebriates of pauper families for three generations; thus, in the

poorhouse of Ontario County there were one hundred and thirteen inmates. These together with their ancestors for three generations, living and dead, represented ninety families; and in these families there were one hundred and sixty-eight dependents, twenty-six insane, twelve idiots and one hundred and three inebriates. In Columbia County one hundred and eighteen inmates represented one hundred and fourteen families, had one hundred and forty-three dependents, twelve insane, thirty-two idiots, and one hundred and twenty-seven inebriates. In Yates County thirty-two inmates represented twenty-six families, of whom fifty-nine had been dependent, four insane, two idiots, and thity-one inebriates. In Kings County one thousand eight hundred and seventy-six inmates represented one thousand six hundred and sixty-eight families, two thousand thirty-nine dependents, seven hundred and seventy-five insane, twenty-three idiots and nine hundred and seventy-five inebriates. Herkimer County had seventy-seven inmates, representing sixty-seven families, one hundred and twenty-eight dependents, twenty-one insane, twelve idiots and sixty-four inebriates.

The total in the almshouses of the State were twelve thousand, six hundred and fourteen inmates, who represented ten thousand, one hundred and sixty-one families whose members for three generations (living and dead) had among them fourteen thousand, nine hundred and one dependents, four thousand, nine hundred and sixty-eight insane, eight hundred and forty-four idiots and eight thousand, eight hundred and sixty-three inebriates. What more convincing proof could we have of the Heredity of Pauperism with those diseases? In round numbers, here are ten thousand families who have produced fifteen thousand paupers, or three paupers for every two families; of insane, about one for every two families; of insane, idiots and inebriates combined, about fifteen thousand, or three to every two families. Can you conceive of such a community of festering evil and not believe that heredity was a powerful factor in producing it? Yet a more alarming illustration has been worked out by Dr. Dugdale on the Jukes family in this State. Most of you are doubtless familiar with it. Springing from one wicked woman, born about 1753, there has been a progeny of twelve thousand, of whom two hundred and eighty were pauperized adults, one hundred and forty criminals and offenders, sixty habitual thieves and seven murderers, besides a long list of licentiousness which we will not transcribe. On a careful enumeration of the expenses of arrests, trials, imprisonments, arsons, loss of time, &c., he estimates the money lost to State and society at one million, three hundred and eight thousand dollars in the short period of the last seventy five-years, and by a single group of one thousand two hundred. Yet he says they are not an exceptional class of people, for their like may be found in every county in this State. I might detain you here for hours in giving cases illustrating this heredity of evil, but I will spare your patience and your feelings. There is an increasing number of noble workers in all Christian countries, but more especially in our own, who are giving freely of their time and means for the reform and elevation of these children of pauperism and crime and disease. They deserve the gratitude of the country for their humble yet noble work. Some are working in prison reform associations, others in compulsory education and reformatories of different

kinds. In this connection we cannot too highly commend our State Board of Charities for the efficient work they are doing in the improvement of the physical, moral and social condition of these unfortunate dependents. In all this large class, there are, as the Board and other charitable workers find, many who can be reached and improved in condition, some taking places in good families, which are the only natural reformatories. Let us hope that these patient workers may be rewarded by a large number of these unfortunates being elevated to useful membership in society. Yet after deducting all such as may possibly be improved and made self-sustaining, there will remain a large class which we might call *Incurables*, from whom the taint of evil cannot be removed. These, from their condition and environments cannot voluntarily adopt any means for their own improvement. Through the course of heredity, they will continue the entailment of their disease, crime or pauperism, thus burdening the State with a sad mixture of evils. Can this be prevented to any great extent, and if so, how? are philanthropic questions of great importance and should interest a profession into whose care these unfortunates are largely placed. As an indication of what we would suggest to prevent the increase of this great evil, we would ask what would have been the result had the heads of the Jukes family, the Chretien family, and others of the same ilk, been cared for in asylums, separating the sexes during the child-bearing period? Contemplate the benefit to State and society in the case of the Jukes family, of the amount of crime that would have been unknown and criminals unborn, besides one and a quarter millions worse than lost, "not taking into account the entailment of pauperism and crime of the survivors in succeeding generations, and the incurable diseases, idiocy and insanity growing out of this debauchery, and reaching farther than we can calculate." The direct or physical effect fades in comparison with the measureless amount of pollution that is cast upon the State and community by such a family.

At the beginning of the present century one Malthus, a practical philanthropist, and clergyman of the Established Church of England, had the boldness to propose as a cure for the increasing pauperism of that country, an increased prudence in marriage among the poorer classes; claiming that unless you have this, improvements in other respects are of very little consequence, and that the temptation to crime in squalid and hopeless poverty causes a great moral degradation of character. But Malthusianism was the synonym for degradation, and Malthus, after being abused by politicians and churchmen for more than half a century, has in the present day, as defenders of his theory, such noble minds as Faucett and Mill who believe it is the only cure for pauperism and that the general operation of checks to population from prudential reasons, indicate the diffusion of a high morality.

Sound political economy cannot deny the inherent right of the State to take means to perpetuate its citizenship in an improved condition. To accomplish this, its duty is to adopt all proper and practicable measures to prevent deterioration in its poorest subject for all combine to make up the character of the body politic.

While it is admitted that the State has no right to interfere with or abridge the right of its most humble subjects, except for the strongest

reasons, we think, as a police for the public health, jurists and legislators on impartial investigation would decide that government has an undoubted right to exercise restrictions on the reproduction of a progeny that is only a curse in a community. Henry Wade Rogers, in a late number of the Princeton Review, says, on a similar subject, "Certainly it is a seeming absurdity that a State should be possessed of the power to legislate for the prevention of offences and at the same time be denied the right to put forth that power to eradicate the cause of almost all offences; that it should be under the necessity of burdening itself with an enormous taxation for the support of the poor, the insane and the idiotic, and at the same time denied the right to remove the cause which make this enormous public expenditure necessary."

In the belief of the "survival of the fittest" some may contend that families affected by evil heredity will become extinct, through their own inherent weakness pitted against the moral strength of the better class. Granted that this *may* be, though not at all probable. The cases of the families cited show that *several* generations of society would be infected in morals and burdened in taxation before any extinction through self-limitation could take place. And it may be some will think these suggestions in advance of the age, that is, in advance of public opinion of the community. As an index to the opinions of those who have given the subject the greatest thought, who have shown the most active interest, and who are in positions to judge intelligently, we wish to make a few brief quotations. Dr. Hoyt, in the report above referred to, (p. 196) says:

"The element of heredity enters so largely in the problem of pauperism that it should receive special attention. The degraded, vicious and idle, who, when in good health, are always on the verge of pauperism, and who, at the approach of old age and illness, inevitably become paupers, are continually rearing a progeny who, both by hereditary tendencies and the associations of early life, are likely to follow in the footsteps of their parents. There is a large number of families throughout the State which are kept together by private and public charity, the sole end of whose existence seems to be the rearing of children like themselves. The line of pauper descent is very difficult to break, but unless vigorous efforts are directed toward this end, the number of the dependent classes will grow in a constantly increasing ratio.

"Few persons who have not given detailed attention to the subject realize how much of vice and pauperism, idiocy and insanity is hereditary. It is believed to be the duty of society to take positive measures to remedy this evil. What forms these measures should take, and how far the effort should be carried, present the most serious questions which press upon the legislator. It is a subject to which little attention has hitherto been given, at least outside of treatises on physiology; but the time is rapidly approaching when its importance will compel the attention of the moralist as well as the law maker."

Dr. Nathan Allen, of Lowell, Mass., in a paper read before a conference of charities at Cincinnati, says: "Who are paupers? What is their history and character? What caused or made them paupers? Careful observations show that large numbers have certain characteristics in common, making what may be called a pauper class, and continue as such for generations.

In every large almshouse are found, to some extent, a permanent set of inmates who have connections in the same or in other almshouses, and whose parents or ancestors have been frequent inmates in such establishments. There is such a thing as families breeding pauperism, and perpetuating it for generations. It is found that they have peculiarities in organization and character, which can be traced back to the same or similar causes.

"The now celebrated 'Margaret, mother of criminals,' reported in New York two years since, furnishes a striking illustration of hereditary crime. An investigation was made through the New York Prison Association, in the jails and prisons of the State, extending back six generations, which resulted in tracing out nearly three hundred criminals descended from one wicked woman! If a thorough inquiry were made on this subject, doubtless other similar illustrations would be found. If the truth could be known, we believe a large amount of crime would be traced back to hereditary influences."

Dr. Kerlin, Superintendent of a State institution for feeble-minded children at Medea, Pennsylvania, says in a paper on the "Causation of Idiocy."

"Sixth.—That in twenty-seven per centum of cases of idiocy we find as a concurrence *imbecility and insanity begetting idiocy*—introduces a very serious question for the law of the State to settle, viz., whether marriage of the evidently unfit shall be tolerated, and whether pauper imbeciles shall continue to entail on the community a burden of woe and expense that heaps up in misery the further it descends.

"It seems incredible that, in an enlightened community, a woman should go on giving birth in succession to five microcephalic idiots, three of whom survive to be supported at the expense of the State so long as they shall live.

"It seems incredible that a female insane pauper should have been discharged two successive times from a county house, returning to a drunken husband to become twice enceinte with defective or idiotic progeny.

"It seems incredible that a husband living with a wife who is known to be insane should go on bidding into being successive imbeciles and incompetents, apologetically explaining that his wife was in better health while enceinte.

"It seems incredible that there should be a county in Pennsylvania where the inbreeding of paupers and pauper imbeciles of the same parentage is possible, until a large family of wretched creatures is issued to scatter and propagate an imfamous blood."

A prominent clergyman who has had a large experience in charity organization societies in England, and the projector of all such societies in this country, when asked for an opinion on this subject, answered promptly, "I would take a hint from the stock breeders and prevent the reproduction of the dangerous class."

President Anderson, of Rochester University, who gave me the key note of this paper, in a recent letter says: "I am glad if any words of mine have led you to an investigation of this all-important subject. I believe it to be the duty of all medical men to study it with care. . . . You will find that the class of persons who are miserably poor are more

likely to marry young and rear large families than those who are wealthy or expect to become so. The tendency of increase is on the whole greatest among those whose children are most likely to become public charges."

Hon. W. P. Letchworth, of the New York State Board of Charities, who has just completed an extended tour of investigation among the eleemosynary institutions of Europe writes, ". . Your proposition, seemingly bold from the lack of public enlightenment on the subject, will eventually be accepted." Perhaps the first practical step in this direction in America was the presentation of the subject by Mr. Letchworth, some years since, in a State Convention of Superintendents of the Poor, held at Poughkeepsie, and the securing of a pledge from that body to co-operate in attempted legislation to provide custodial care of idiots. In mentioning the experimental institutions at Newark, Wayne County, for idiotic and weak-minded girls and women during the child bearing period, Mr. L. writes: "I believe there are about one hundred there at this time, who, but for this arrangement, would be breeding children in the poor-houses or elsewhere. What our board desires further is a similar institution for male idiots." The Newark asylum referred to originated through a lady member of the State Board, who in her official visit to the county poor-houses, was shocked to find more or less imbecile and idiotic females the mothers of illegitimate children. She reported the matter to the board, and the result has been the opening of this asylum where about one hundred of these unfortunate females are properly cared for.

In this imperfect manner, I have attempted to portray a growing evil, and to indicate, as I believe, the direction the remedy should take. In such cases, it is our high prerogative as conservators of the public health, to point to the facts and designate the necessity for legislation. Here we rest the case, and leave the responsibility for action where it properly belongs, with our legislators. We show the necessity of bridging the chasm, without giving any plan or detail for the work. But I believe if the present Legislature were to appoint a commission from such men as the members of the State Board of Charities and the Prison Reform Association, to confer on the subject during the year, they would report a practical plan at the next session.

Ladies and gentlemen, I beg your pardon if I may seem to have digressed from a strictly professional topic. You have all had considerable experience, and have certainly seen living illustrations of some phase of this subject; and I believe it is our duty, as we are blessed with an intelligence above a less favored portion of humanity, to make all possible endeavor, for the purification of society generally, as well as for the restoration to health of its individual members.

VII.

Similia Similibus Curantur.

By HENRY MINTON, M. D.

Read at the dinner given by the Homœopathic Physicians of Kings County to the State Homœopathic Medical Society, at Hotel Brighton, Coney Island, Sept. 8th, 1880.

Once on a time, in years gone by,
A German savant did descry,
And gave the world, as more humane,
A method new of curing pain.
While rendering to his mother tongue
A work on drugs, long since begun,
A vision flashed athwart his mind;
If he could furnish to mankind
A law of cure, as free from flaws
As any one of nature's laws,
How vast a good there might accrue
To suffering men and women too.
And as he pondered, thus he thought;
While birds and beasts by God are taught,
And lead by instinct to the cure
Of all the ills which they endure,
Should man alone, his noblest work,
Be left to wander in the dark,
Without a light or law to show
Which way the stream of life doth flow?
Birds at the north will gather fast
And south-ward shun the winter's blast,
Which instinct tells them soon will come,
E'en 'fore the bees have ceased to hum
Their matin offerings, round the hive,
Where food they've stored, that they may thrive,
Through winter's cold and stormy days,
And thus again are Nature's ways,
Or laws, obeyed without a thought
By creatures dumb and all untaught.
These were his thoughts, and this his prayer,
As day by day he wrought with care,
Translating books, comparing thought
Of teachers now with those who taught
When art was young and science crude;
When compound boluses most rude
Were made from excrements whose name
Would paint our M. D.'s face with shame.
To Cullen's works he came at last,
Translating *China* from the past
He found it cured, when taken right,
Diseases of a certain type.
If China cures a certain ill,

Composed of fever, sweat and chill,
Which 'twould produce in healthy man
When taken by the single plan,
Then naúsea, colic, bloody flux
Might yield to Ipecac or Nux,
Because these drugs, on Cullen's plan,
Will cause such things in healthy man.
This thought impressed his master mind,
"Perhaps *all* drugs will cure their kind,"
If this be true, the question's solved,
Here is a *law*, if once evolved,
Will prove a compass o'er the sea
Of dread disease and misery.
To this grand task the dauntless mind
Of Hahnemann at once inclined.
Inspired by God and love of man,
He did the lore of ages scan
In search of facts, that might attest
Or else refute and set at rest
His vision of a law of cure
That would the test of time endure.
Specific drugs the ancients knew
Would cure diseases, not a few;
A law of cure, they did not claim,
But gave specifics for a name,
Cathartics, emmenagogues, diuretics,
Astringents, tonics and emetics,
Were all arranged in proper place
And marked "specific" for some case.
This is for heat, that is for chills,
This is for woman's various ills,
That is for fever, called malaria,
This is for bilious dysenteria,
That is for bruises, that for burns,
This is for scrofula, that for worms,
This for the blood, which had to bear
Of human ills the largest share;
The lungs, the liver, and the heart,
The kidneys, stomach,—every part
Of man's economy was tabled,
And with a drug distinctly label'd.
Prescribing thus became an art,
A routine practice, from a chart,
'Twas called "secundum artum" then,
And greatly pleased the minds of men.
But like a ship without a chart,
At random sailed the healing art.
It had no law its way to guide,
But on experience blind, relied.
When dread diseases scourged the land

And baffled art on every hand;
When brave men's hearts were oft dismayed
And timid ones were sore afraid,
What wonder then, was heard the cry,
"Our art is impotent," they die;
Or prayer from every honest heart
For *law* to guide the healing art.
Still Hahnemann his course pursued,
And labored on as he reviewed
All arts and theories of the past,
From Esculapius to the last
Inventor of cathartic pills,
A certain cure for human ills,
And everywhere through every creed,
Found relics of a crying need
And *fragments* of a law of cure,
But nothing tangible or sure.
Hippocrates and Sydenham saw,
Visions of a therapeutic law,
Visions they could not comprehend
Or utilize to any end.
But Hahnemann, with busy hands,
Had gathered up the various strands
Of others thoughts and others deeds,
On all their numerous arts and creeds,
And, when his eye the vision caught,
'Twas comprehended at a thought.
"This is a law from heaven," cried he,
"That like cures like, vouchsafed to me
For man's deliverance from pain,
O God, I thank Thee in his name."
Straight to the world, with heart intent
On man's deliverance, he sent
A statement clear, that might insure
A knowledge of this law of cure.
'Twas like the coming of that morn
When to the world the Lord was born,
Who came to carry out the plan
Divined to save the *souls* of man.
It was received by sages then
Like other laws vouchsafed to men.
Some took the law to test its worth;
While others cursed the very earth
That bore a man who dared deny
The precepts they were governed by.
'Twas ever thus since first the sun
His radiant beams on Eden shone,
The advance guard in every fight,
Must *battle* to maintain the right.
"Similia Similibus Curantur,"

Was not unfurled as any banter,
But as a motto, which the master saw,
Expressed in brief, a therapeutic law.
No sooner was this law unfurled
Than envious parties at it hurled
Their wit, sarcasm and malignant spite,
Thinking, no doubt, to kill it quite.
But like the waves 'gainst yonder shore
Now coming in with such a roar,
They strike the beach and backward break,
While others follow in their wake,
So fell the shafts which envy shot
At Hahnemann, but harmed him not;
They fell as harmless by the score,
As fall the waves on Brighton's shore.
While other modes of cure have passed,
And with forgotten things been classed,
This law of cure in radiance bright,
Still bears aloft its beacon light,
And so for ever it shall stand,
A mandate of Divine command.
Now, if from yonder world of bliss,
Thy spirit can descend to this,
We ask thee, Hahnemann, to wing
Thy way to join our gathering.

VIII.

Have we a Therapeutic Law?

By JOHN J. MITCHELL, M. D.

The movements of nature are determined by law. Changes occur, but it is through the influence of one law overpowering another, or impeding its action. That which we term an accident is merely the sudden or unexpected interposition of another force, which changes the order of sequence, as ordinarily observed. Thus it is the law that fluids seek an equilibrium; yet liquids will rise in a tube influenced by the law of capillary attraction, thus moving contrary to the law of gravitation, which generally controls them. It is the law of central attraction that bodies shall seek the centre of the earth, and yet the iron bar will rise from it and move towards the magnet suspended above the iron. We do not say that these seeming contradictions of the law of motion are due to inclinations or expediency or rule, but they are still under some of the eternal laws nature has placed upon them. In the discussion of cause and effect, we never decline to call the formulated relative of one to the other, a law,

if we are sure of their relationship. We propose to examine the domain of therapeutics, and to ask the question: Why shall we not use the same phraseology when speaking of the effects of drugs upon the diseased human body?

It will be wise for us first to examine the terms employed carefully. Webster defines natural law, "As the regular method or sequence by which certain phenomena, or effects follow certain conditions or causes, as the law of gravitation, a geological law, the laws of physical descent; the uniform methods or relations according to which material and mental forces act in producing effect, or are manifested in phenomena."

John Stuart Mill says of law, "It is the custom, whenever they can trace regularity of any kind, to call the general proposition, which expresses the nature of that regularity, a law."

In astronomy we have Bode's law, giving an approximate empirical expression of the distance of the planets from the sun. We have Kepler's law expressive of the order of planetary motion. In physics there is Marriott's law, expressive of the fact "that in an elastic fluid under compression at a constant temperature, the volume is inversely proportioned to the pressure."

Hooker defines law as follows: "That which doth assign unto each thing the kind; that which doth moderate the force and power; that which doth appoint the form and measure of working—the same we term a law."

Richardson says of it etymologically, "that it means something or anything laid down as a rule of conduct. A statute or decree. An edict."

Worcester defines law as "a constant and regular mode or order, according to which energy or agents act or operate."

Reid says: "The laws of nature are the rules according to which facts are produced, but there must be a cause which operates according to these rules. The rules of navigation never steered a ship and the laws of gravity never moved a planet."

The Duke of Argyle writes: "It is an observed order of facts." "The arranging causes, and the forces may be unknown, as in Kepler's laws. But when the force thus operating and its methods are surely determined then it may come under the higher sense of law, as in gravitation. . . . Law does not explain itself. It merely sets forth the order of the phenomena."

We know there is a force called gravity, we know how it acts, and with what power, but we have no idea what it is. Again we never find a law acting alone, it is always modified and perhaps controlled by some other law acting at the same time, and along the same plane. No law is able to cease to act or to change. Any law may be counteracted.

In chemistry we have the most wonderful exhibitions of the tenacity and subtleness of law, causing the same atoms when united in varied proportions to form the most diverse compounds. Thus the elements Carbon, Hydrogen and Oxygen when combined according to the number of atoms composing three equivalents of water and two of Carbonic acid, are oxidized they form that terrible poison Oxalic acid.

$$3({}^{H}_{2}{}^{O}) + 2({}^{C}_{2}{}^{O}) = {}^{H}_{2}{}^{C}_{2}{}^{O}_{4} + 2({}^{H}_{2}{}^{O})$$

Again the elements of tea and strychnine (Theine and Strychnine) are identical only differing in their proportions.

General laws are not without exceptions. Thus it is the law that cold contracts bodies and that they are expanded by heat, but in the case of water, when the temperature becomes less than 32° F the congealed mass expands. Bismuth also expands when cooling from the fused state. It thus appears that the term, law, is legitimately applied:

First—To the relation existing between cause and effect.

Second—That a law within its domain is universal in its action.

Third—That it is not changeable but it may be controlled or perhaps counteracted by other laws.

Fourth—There may be exceptions to a law, yet in general terms we may insist on the use of the word.

Fifth—That the mode of action of a law, and the minor rules that control its application may be unknown, and yet it is no less a law.

We will return now to the question with which we commenced this discussion, and ask in the light of the above explanation of the term, whether there is a law governing the relation between the action of certain bodies called drugs or medicines, and certain conditions of the human body which have been called diseases or disease.

It would seem *a priori*, that if ever a law was needed, here was a position in which one should have been placed and firmly held. The play of the elements among themselves is important, but we can conceive that they might change in their action one towards another, and of course confusion, but perhaps no disaster would occur. But when these elements come into contact with the delicate human structure, it seems a necessity that their action should be constant, precise, surely the same forever. We observe that in all the ordinary relations of life, cause and effect follow each other with unerring precision. The knife cuts, the fire burns, the lightning kills, the arsenic poisons. Can it be true that it is only in remedying the results of these disasters that nature is capricious and changeable; at one time acting in an intelligent manner, but in a moment changing its *modus operandi*, so that the formula which we have considered a law in a moment becomes merely a rule of action, perhaps not even the best one, and having immense deviations from constancy. It is incredible that in everything, but the treatment of diseased conditions, law holds, but in therapeutics experience is the only guide. Experience that varies as the winds. Pointing the student in one direction to-day and perchance in a diametrically opposite one to-morrow.

"Have we a therapeutic law?" I do not mean to ask if we have a chemical law, whereby a poison having been taken, I can pursue it with its antidote and save a life. I do not mean, have we a surgical law, under which gangrene having taken place in a limb, we are bound to sever the dead tissues from the body in order to save the life of the individual. I do not mean, have we a palliative law, under which the pain of an operation or the pangs of child birth or cancer can be ameliorated, obliterated, through the aid of the narcotic or the anæsthetic. I am not speaking of the laws of hygiene, of climatology or of dietetics, in accordance with which we are enabled to advise the individuals under our charge as to the most healthy localities for their habitation, to assist them in freeing their homes

from the poisonous gases that so frequently infect them, that will enable us to discover to them the best food, and the quantity most advisable for them to eat. I am not speaking of any of these laws, which are so often included by the thoughtless under the term therapeutic law; but the man being sick, abnormal processes going on within his system, vitality giving way before it, is law then set aside, and traditional experience to be our only guide? I contend that therapeutics has its law! At this point I must carefully define the term "Therapeutics."

Webster says "it is from the Greek *therapeutikos* meaning to heal, to take care of, pertaining to the healing art; concerned in discovering and applying remedies for disease, curative."

Watts defines it as follows: "Medicine is justly distributed into prophylactic, or the art of preserving health, and therapeutic, or the art of restoring it."

Richardson says: "Therapeutics is that which can or may heal or cure."

Colgrove remarks: "It is that part of physic which prescribeth remedies for the curing of disease and recovery of health."

Brown says: "Therapeutics or curative physic we term that which restoreth the patient unto sanity, and taketh away diseases actually affecting."

Worcester defines it: "Curative medicine."

Dunglison says: "It is that department of medicine relating to the application of remedies, and the cure of disease."

Ferrand, in "Love and Melancholy," says: "The remedy in my opinion, should rather be prophylactic for prevention of disease, than therapeutical for the cure of it." In short therapeutics has to do with *disease* and *their cure*. And as Dr. Dake of Nashville, so aptly puts it, "It is applicable in those ailments of man only, where the existing organisms have the integrity of tissue, and the reactive power necessary for recovery; the efficient cause of the affection having ceased to operate."

The arsenic if allowed to act long enough, will kill the man. If antidoted with the oxidized iron the life may be spared for the moment, but the stomach having become inflamed, the man may die of gastritis. It is the province of the therapeutic agent to cure the gastritis after the poison is antidoted or eliminated.

And we have a law by which this agent can be selected, and administered. That Omnicient Wisdom which has bound atom to atom in unvarying proportion, which has made affinities so constant that planets wheel and suns revolve unerringly in their orbits; that has proportioned their weights and distances so accurately that a wrecked world or an undiscovered planet can be calculated or found, has not left the masterpiece of creation to be the sport of chance, and the creature of accident, in his weakness and his sorrow.

I shall say but little of the rules of practice and the supposed laws from which they were deduced, which appeared during the ages before the discovery of that which we esteem to be the great law of therapeutics. Their lack of universality and constancy was but too apparent. One of which we hear very much at the present time was latinized as "contraria, contrarius curantur." But when attempted in practice its perfect lack of adaptability was at once seen. A patient presenting himself with a neuralgic pain, consisting of a throbbing in the right temple accompanied

with a flushed face and without fever, a prescriber according to this law would be sadly puzzled to find the contraries for such a case. And it was not very plain what the opposite could be to a cough, dry and racking caused by a tickling in the larynx. In short the more this alleged law was examined, the less reputation it had, until now there are none to do it reverance, unless it be the backslidden homœopathist, who contends that the law of the similar is but a phrase of this old law of Contrarius, because it is not purely *isopathic* in its character. It would be as logical to say that the color green was not green because it must have black in it!

But again, it was evidently not the great law of cure, that all sick people could be restored to health by the depletion of blood-letting. Indeed the cynics of those days of blood, affirmed, that the days of man would be indefinitely prolonged if neither doctors nor lancets had been invented.

The idea that disease was a foreign body or substance, or even a spirit of evil, which having entered into a man, must needs be expelled, "vi et armis," long held the world under its power.

We have of late years emancipated ourselves from the sway of these ideas of spiritual agencies,—and immaterial powers,—for though men often act as if the spirit of evil indeed possessed them, yet we find when the possessed is in the asylum or the jail—that we have also caught and caged the demon who made the trouble.

Just here I think it but fair to remark, that to take the stern materialism of the present day, for which the world is not indebted to any of us, and to exult over our ability to hurl it against the classical thought of a hundred years ago, is hardly consistent with the frankness that should characterize scientific investigation. In all probability we would have blundered in exactly the same manner, if we had lived in those days and had similar surroundings. Words have changed. The dynamics of a body we now speak of as its inherent properties, and we are not called in question as to our scientific orthodoxy. And if instead of psora or itch, we now speak of the scrofulous cachexia, and remark that our patients are suffering from herpes or erysipelas, we find none to reprove us, or to doubt that the diseases should *not* be repelled from the surface, but they should be cured by internal medication. Let us be modest in our argumentation and give the past upon which we have built our superstructure, all the credit that is its due.

But the true law of therapeutics had been discovered, and was to the effect that a series of symptoms found in a diseased person, would be counteracted and controlled, if we could administer a drug which when given to a person in health would produce like symptoms. This was the whole of the law, and this law was discovered by Samuel Hahnemann. I am aware that Hippocrates hundreds of years before alluded to it.

Let me here do Hahnemann the justice, which, I am sorry to say, he does not always obtain in these later days. Amid all the faults and fallacies that have been ascribed to him, it cannot be justly said that he was dishonest enough to array himself in borrowed plumes. In the last paragraph of the introduction to the Organon, he names Hippocrates, and gives him credit for his thought, citing the original Greek. In a foot note he says, "In citing the following passages of writers who have had some presentiment of Homœopathy, I do not mean to prove the excellence

of the method, but I wish to free myself from a reproach of having passed them over in silence, to arrogate to myself the merits of the discovery. He further names B. Bouldue, DeTharding, Bertholow, Thorny, Stœrck, and Stahl, as having enunciated similar opinions. Truly we have here the quiet modesty and the inherent honesty of great merit. But who would have supposed, if they knew of Hahnemann through the writings of the critics alone, that he had ever in his works named Hippocrates, or even given the thought to the world, that another had given utterance to the idea of Homœopathy, before his own day?

The fact was, the great continent of medical truth had been approached again and again, even the birds had been heard to sing upon the goodly land, but it remained for Hahnemann to land and claim its possession. Before his demonstration, promulgation and practical application of it, none could tell of the wealth of power in his discovery, none could nominate it a law. He may indeed have erroneous ideas as to the proper method of applying the law. He may never have discovered nor even heard of that monster Acarus Scabici, though history seems to prove he well knew of its existence, yet surely it was no more his fault than it was blameworthy in our fathers, that they never knew of the spectroscope, nor carried on conversations with their friends when miles apart through their office telephones.

None of these failures to do or to know can ever deprive the immortal Hahnemann of the glory of having evolved by induction and practically demonstrated the law—"*Similia Similibus Curantur.*"

There were certain rules and methods which he observed in applying the law, to which experience has seemed to offer some just objections. But in his experience they seemed necessary in order to gain the best results. It is wise in us to be very cautious how we negative or neglect them. Among these axioms, was one to the effect that only a single drug should be exhibited at a time. It was his opinion that this was all that a physician could understandingly prescribe. And his belief was that if they attempted to do more than this, namely, to combine many drugs in a single prescription, or to alternate their remedies, the result was disastrous to scientific investigation, and so complicated the problem of disease, that not even a master mind could eliminate truth from error. It is not as yet demonstrated that Hahnemann erred in his opinion, as to the danger to truth to be feared from this method of practice, nor that his was not the artistic method of applying the law. In testing an unknown body by the aid of chemical laws, the cases are very few in which the chemist adds a number of his reagents to the solution in question at the same instant. He uses one and notes the reaction, then another, and another, until the question is solved, and the truth established.

Hahnemann also observed that doses very much smaller than those hitherto employed, were necessary in order to cure the patient without aggravating the suffering or the disease. And I think none will deny the fact, that the whole world applauds the service he and his followers have done in diminishing the doses of medicine administered to the sick.

But it is urged that he went too far in this direction and merged his logic into mysticism and spiritualism.

This is possible. Has there ever been a mind so perfectly developed

in every part, that having thought profoundly, and made such discoveries in the arcana of Nature, as to astonish the world, that has not at the same time exhibited the weakness of endeavoring to push theories and discoveries too far?

With regard to the amount of medicine to be exhibited in any case, will it not be time enough for us to speak with contempt of the doses which he employed, when we are able to develop and formulate the law of posology as he discovered and formulated the law of therapeutics?

Where is the second Hahnemann who has done or can do this? Permit me here to suggest, that it ill becomes the professor of homœopathy to assay the weaknesses of so great a man, and to parade them before the world in our journals.

Most of the articles adduced by those who speak so bitterly of Hahnemann and so contemptuously of his practice, and the long arithmetical calculations which they present to us, can be found in the literature of the past.

Simpson and Henderson, those giants in debate in comparison with so many who are now attempting to handle their weapons, have presented nearly all these arguments long ago. And have not the hearty and conclusive *replies* to these objections and criticisms, been the study of our boyhood and the delight of our maturer years.

Fresh arguments and pages of figures can still be found in the works of these old warriors, for and against Homœopathy, all unused and all ready to the tyros hand.

The almost miraculous cures that the law, which Hahnemann had discovered, enabled him to perform, almost gave a license to his mysticism. And it was not so very strange that in his extreme old age, he conceived the idea that the spirit of the medical agent could be forced from the crude matter that held it, and be hurled in all its immateriality against the disease with which he was contending.

In this age of stern materialism, we can easily deny the truth of all these visions, and theories, but need we try to build up our own fame, by digging among the ruins occasioned by the explosion of the theories of the past? An explosion, by the way, for which we are in no way responsible, and toward which no efforts of ours have assisted in the least.

I think it is but safe to say that very few of us will ever equal the old man Hahnemann when in his prime, either in learning or ability to reason clearly and logically. I am very sure none of us will ever be able to leave to our posterity so glorious a heritage in the domain of medicine, as he.

We may rest assured that the child-like fancies of the old man will never cause the laurel wreath to be taken from the brow of the immortal discoverer of the law *Similia Similibus Curantur.*

I think I have fairly demonstrated that the law "Similia Similibus Curantur," fills the conditions laid down in our first argument as necessary to the establishment of a law. Let us review them.

First—It does express the relations between cause and effect.

Second—That within its domain, it is universal in its action.

Third—It is not changeable, but it may be controlled, and perhaps counteracted by other laws.

Fourth—There may be exceptions to it, yet in general terms we may insist upon its being a law.

(We should remark however, that as yet the exceptions are unknown or not demonstrated.)

Fifth—The mode of its action is not certainly known. The minor rules that control its application are not formulated, and yet according to our definition it is no less a law.

Agreeing in all points with our premises as to the necessities of a series of causes and effects, the formula of which should be called a law, I think I have a right to reply in the affirmative and say *we have a therapeutic law*!

I shall undertake to answer but few of the objections that have been urged to the truth of my thesis, that this is a law, and not a mere rule for dispensing medicine. It is urged that the formula fails very frequently, when its application is attempted in the treatment of disease. To this I reply that the answer to a problem of a case of sickness, is never a known quantity. A case of measles may prove fatal, while diphtheritic croup and phthisis pulmonalis have probably both been cured. But we can never say of the lightest case, of the most universal disease that it *shall* result in recovery.

Neither can we say that any given law of cure may be applied to it and its truth or falsity demonstrated by the result of a single case.

And again, the lack of definiteness in proof, the many fanciful symptoms that have without doubt crept into our Materia Medica and the hundred thousand diverse medicinal forces, that *unclassified* and *unproven*, lie all about us, in the profession of nature, constantly press the thought home that perhaps the similimum of the case before us is yet unknown. But it is hard to induce the earnest student of Homœopathy to believe that it does not exist.

Finally, who of us is ever absolutely certain that among the hundreds of *proved* drugs already within his reach, he has chosen just the right one, or that more profound study, or a more analytical brain, might not have selected another and a better remedy.

In our provings themselves, words do not by any means always convey the idea of the distress occasioned by the drug. And in disease, nature expresses itself in acts not in words, and these have to be translated through the aid of the physician into a mental word picture of the diseased condition.

Is it any wonder with so many chances to err in expression, that the drug is often wrongly chosen, or that the disease is erroneously pictured? And that failure results from the use of the wrongly chosen medicament?

But aside from these exceptions let us contemplate but for a moment the millions upon millions of instances, where the result from the medicine, homœopathically administered, has perfectly corresponded with our wishes, our theories and our law. The pain has been allayed, the diseased organ has been freed from the incubus preventing its normal action, and the individual has gradually passed from *disease* to certain and most joyous *ease*.

Surely if Baconian investigation is of any use in the scientific world it has been in proving to us that we have a law that may direct our therapeutics.

matology is at times fallacious, and perhaps we have erred in greater attention to our instruments of precision and the physation of our patients. We may in the past have confounded vulsions with uræmic poisoning, or a misplaced uterus with of the bowels. But such errors of diagnosis will surely occur and with a careful gathering of symptoms and the applicaer drug to the case, we have no fear but in time the world ...nced of the verity of our law.

Concerning the vulgar error of confounding therapeutic conditions with those demanding surgical, mechanical, chemical, hygienic or palliative appliances or aid, I need not allude, being sure they will not be urged against the universality of the law by frank or intelligent physicians.

It is to this law, then, that we have avowed our allegiance. It is for belief in this law that we have been held up to the scorn of our medical brethren. It is upon this battle ground that we can all heartily rally, and present an undivided front. And if faithful to our trust, diligent in our research, careful and scientific in our teaching, our learning and our practice, it will come to pass that "*In hoc signo vinces.*"

IX.

Jatropha Curcas.

By JOHN J. MITCHELL, M. D.

This drug has proved of very great value in the treatment of certain cases of chronic diarrhœa, of summer complaint of children, of cholera infantum, and even of cholera morbus. A very common group of symptoms is covered by it better than by any other drug yet proved. The symptom that seems almost characteristic of the drug is, "*the stool gushes out like a torrent.*"

The passage is watery, profuse and generally light colored, so nearly white, in fact that it has been denominated a "*rice water stool.*" There is rarely much pain. The passage being very hurried and without tenesmus, the large quantity evacuated rather relieves the abdomen of its distention for the time being.

A few other drugs have this *sudden gushing stool* among their characteristics, but a differential diagnosis between them, though important is not difficult. Among these, Croton tiglium should be first examined. The record of the stool in this drug is "*That it is shot out of the rectum.*" Its color, however, is a light brown or dirty green. There is colic and writhing in the umbilicus, and the symptums are worse after drinking, and during nursing or eating. Then the color of the stool, the pain and the aggravations differ from Jatropha.

Kali bichromicum has from one of its provers the following: "Violent urgent desire for stool, woke her at six A. M.; she was unable to reach the closet soon enough; the watery contents of the intestine *spurted*

from her; such violent tenesmus followed that she was unable to rise from the stool." We have here the distinctions of the time of the stool and the tenesmus. Moreover, Kali bichrom. generally has brown frothy, water, or black, bloody and jelly-like mucus as its stool. The tongue is also dry, smooth and red or cracked.

In Natrum carbonicum we find noted, such violent urging to stool that he had hardly time to reach the closet; there resulted a thin stool "*that forcibly spurted from him.*" There was colic and tenesmus, and it was worse before eating.

Sulphur has symptoms very similar to Natrum carbonicum, but the quantity passed involuntarily is rather small, and the remainder of the stool is slow, there is at times even an uneffectual urging. The time of these symptoms is different also; being from nine to ten A. M., some hours later than Kali bichrom.

In the Jatropha patient we shall generally find a pale face, margins dark about the eyes, and unquenchable thirst. The vomiting is albuminous, if any. There is often rumbling in the abdomen, "as if a bottle of water were being emptied in it," which does not cease after the stool. The pulse will be frequent and weak, almost pulseless, there is great weakness, the skin is cold, with clammy perspiration. Cramps in the legs and feet. The patient is better in the open air, and worse upon entering a close room.

This brief analysis of the symptoms of this drug may not unprofitably be followed by the narration of a few cases where its use in disease has proved the truth of its pathogenesis:

C. A., aged twenty months; teething. Has had cholera infantum for some eight or ten days; vomiting and diarrhœa very severe, frequent and exhaustive. The disease has been modified, rather than controlled, by drugs that from day to day have seemed indicated. At this stage, the child presented the following symptoms: Very weak, skin cold and clammy, pulse *very weak* (one hundred and forty) at times scarcely perceptible, head hot, but no signs of effusion; evacuations every hour at least, often more frequently; vomits very often; glairy mucus and the milk he takes (condensed milk and barley water.) The passages were watery, profuse, without color, little odor. Calc phos., and afterwards Helleborus were exhibited during the next twenty-four hours, without any benefit. The next morning the child seemed in a state of impending collapse. The mother remarked during my visit, "that the passage came all at once and seemed to gush from him." This called to mind the symptoms in Jatropha. The complexion of the case fitted well otherwise, and it was given at hourly intervals. In three hours the passages were lessened and indeed under control, as there were only three in the ensuing twenty-four hours. The vomiting ceased during the day and the child went on to a perfect recovery.

H. C., aged sixteen months, was brought to its grandfather's in this city, from the north to die. It had been teething for eight months, and three weeks since, summer-complaint and afterwards cholera infantum set in. The homœopathic treatment had only been successful thus far in preventing a fatal result, but the child was exhausted, brain symptoms were developing, the passages were frequently two in an hour, and it

vomited almost everything it took; even a teaspoonful of water containing the medicine was ejected. It lay with its eyes half closed, and rolled its head from side to side, and uttered, from time to time piercing cries. In the course of forty-eight hour's careful observation and ministration, the symptoms of Jatropha were found to fit the case very exactly. After twenty-four hours exhibition of the drug at frequent intervals, the passages were lessened and in a few days convalescence was established and, without the aid of any other remedy than Calc carb., the child was discharged cured.

These two are but typical of very many cases of cholera infantum, in which Jatropha has proved of very great use. The symptoms of the group I have indicated being present in a patient, I have never known it to fail me.

A. H. S., aged thirty-seven years, had been subject to chronic diarrhæa for a number of years. He came under my care about two years ago, and, after a number of weeks medication, was cured, as he supposed by Natrum mur. The symptoms did not return for over a year, when, in response to a cold, they again manifested themselves. There was great prostration after the stool, which occurred shortly after breakfast; it was hurried, and they were rarely more than two in number, following each other at a short interval. The first one was feculent; the second, watery and light colored. There was hardly any pain. Sulphur seemed the medicine indicated, but, after giving it for a number of weeks, there seemed to be no change in his symptoms, unless for the worse. He had used Nux vomica before he came to me in the spring. His old medicine, Natrum mur., was given without any result and both patient and doctor were becoming discouraged. About four months ago an abstinence from medicine for ten days was advised, and then the symptoms of the case were carefully collated, in order to study the case afresh. I found, among other minor symptoms, the following: The second, or weakening stool came on *after reaching his office*, an hour or so after breakfast. He was always better in the open air; the stool itself was profuse, it was watery; it had scarcely any color; there was a very little pain some fifteen minutes before the passage, none during or after it. There was very much rumbling in the abdomen, and large quantities of wind passed with the stool. I asked him if he was hurried to the closet, and how long he remained, "I have to go pretty quick," he replied, "but it all comes out with a gush and I need not be there two minutes." Jatropha was given, and, in three days, he was entirely relieved, and, now more than three months since, he has had no return of his trouble.

I have had no case of cholera morbus in which it seemed indicated, though I have no doubt in a cholera season, such would occur.

X.

The Law of Potencies.--The Minimum Versus the Small Dose.

BY IRA BARROWS, M. D.

To the Homœopathic Medical Society of the State of New York, Gentlemen:

In complying with the cordial invitation of your Recording Secretary to write a paper to be read before your honorable body, at its annual or semi-annual meeting, I disclaim, at the outset, any intention of discussing the subject presented in a spirit of criticism; but fairly and clearly to present my views as I have imbibed them from the study of Dr. Hahnemann, and from my own observations in thirty-eight years of homœopathic practice. The subject of this paper was suggested by a report of Dr. Paine, read before the Homœopathic Medical Society of Northern New York, at its annual meeting, held at Saratoga, July 8th, 1879; a synopsis of which is published in the *N. E. Gazette* for November, 1879.

The question of potencies and doses, which is now so generally being agitated by homœopathists in this and in other lands, and into which discussions, the report which I am about to consider largely enters, was presented by your correspondent in a paper read before the Rhode Island Homœopathic Medical Society, at their annual meeting in January, 1880. This report is entitled, "The Law of Potencies, The Minimum Versus the Small Dose."

In reading this report our attention is called:

First—To the question of the soundness of the theory of dynamization, as taught by Dr. Hahnemann and to the recommendation of the "adoption of the only prudent safe and conservative course, in order thereby to promote and preserve the true interests of homœopathy, viz.: by formally disassociating it from the doctrine of the minimum dose, and the theory of dynamization."

Second—That "the small dose is a corollary of the law of cure and being within the limits of material quantity is reasonable and philosophical, and is a proper subject for investigation from a homœopathic point of view."

Third—That "Science fails to demonstrate the presence of the drug in any higher attenuation than the tenth or eleventh centesimal, and therefore that the doctrine of the minimum dose, a product of an error of judgment on the part of Dr. Hahnemann, is unsound in principle; evidently non-homœopathic, and being associated with homœopathy, has greatly retarded its progress."

Although not in the order in which the propositions are arranged in the report, these three points seem to comprehend the whole gist of the objections therein set forth with "the reasons why homœopathists should clearly define their position regarding these" so-called "fundamental errors of practice." Before proceeding to consider these points, we should, perhaps, give the *Reporter's* prefatory remarks as a reason why he introduces these propositions.

After speaking of Dr. Hahnemann's errors of judgment, what science has done and cannot do, of the minimum and small dose, etc., the *Reporter* proceeds: "The causes which have led to the adoption of this strange and visionary phase of homœopathy have originated in the acceptance, without sufficient and thorough investigation of the fallacious doctrine of the minimum dose and the absurd and unphilosophical theory of dynamization. The theory of the minimum dose, having been proven unsound and irrational, should be discarded and the theory of the small dose substituted.

The theory of the small, within the generally accepted limits of *material* medication, can never be considered extravagant, unreasonable or unphilosophical; therefore will not impede the acceptance of the homœopathic principle, but will, on the contrary, favor its adoption and more frequent application in practice by all classes of medical men. Let us then as representatives of that which is rational and conservative in the homœopathic school, recommend discarding the theory of dynamization and the doctrine of the minimum dose and substituting, for the latter, the theory of the small dose."

Then follow the propositions:

In entering upon this discussion let us first enquire what is the theory of dynamization as taught by Dr. Hahnemann. We have it in his Organon, page 199, § 269. "The homœopathic healing art develops for its purposes, the *immaterial* (dynamic) virtues of medicinal substances and to a degree previously unheard of, by means of a peculiar and hitherto untried process. By this process it is that they become penetrating, operative and remedial, even those, that in a natural or crude state betrayed not the least medicinal power upon the human system."

("*Immaterial.*" This is a leap in the dark, no human kin has ever fathomed, dynamics we claim to comprehend.)

Dr. Hahnemann's process of preparing medicines is well understood by homœopathic physicians.

This, then, is the dynamic acquisition which Dr. Hahnemann claims for the medicines subjected to his process, a continued development of new surface as the attenuation progresses, and when administered in sickness they are "penetrating, operative and remedial."

The objector is prepared to admit this to a certain extent, so far as subdivision of particles of matter can be traced by scientific tests.

We must remember, however, that drug poisoning is not the kind of power that Dr. Hahnemann proposes to develop, but the curative or remedial power.

It is a principle in natural philosophy that matter is indefinitely divisible; but as this principle is now disputed by scientists we will say matter is divisible to a great extent.

Matter can therefore be dynamized to a great extent. If one grain is susceptible of dynamization, then by the same rule one hundredth, one thousandth, one millionth of a grain, and so on, may acquire potency. If Dr. Hahnemann's rule for potentization nicely separates and exactly preserves integral parts of the original whole, and develops new surface in every successive trituration and succussion; then it follows that every such trituration or succussion imparts additional potency to the particles

submitted to the process. But the exactitude of Dr. Hahnemann's rule for dividing matter preserving its integral parts and developing the surface of these particles will not be questioned. It is therefore a sequence that the triturations and succussions made according to the Hahnemannian rule, not merely attenuate but positively potentize them. It is of no consequence whether matter is divided by trituration and its particles mingled with sugar or divided by succussion and its particles mingled with alcohol, the principle is the same. If in the successive steps of trituration and succussion, the whole mass could be preserved and carried forward there would be an immense accumulation of drug power in each successive preparation. But not so in Dr. Hahnemann's method of dynamization; in the second step ninety-nine parts of the drug are lost and only one part is dynamized. In the third step other ninety-nine parts are lost and so on. While, therefore, the particles which are preserved are continually advancing in the dynamic scale, accumulating energy, becoming, in the language of the Master "penetrating, operative and remedial," the drug power is made weaker by the process of a heavy subtraction.

I am aware of the claim, that the last molecule passes out of the bottle at the tenth or eleventh dilution and that all we have after, is well shaken alcohol. Well, if all there is of remedial power in drug and all there is of disease, is visible to the naked vision or to the microscope, we will grant it. But we shall further consider this question as we proceed with the discussion.

The second point for consideration, which is the fourth proposition in the report, is, that "the small dose is a corollary of the Law of Cure, and being within the limits of material quantity, is reasonable and philosophical and is a proper subject for investigation from a homœopathic point of view."

That the Law of Cure has any reference to quantity is, to me, inconceivable. They certainly can have no relation to each other. Neither the heroic nor the small nor the minimum dose can be inferred from the Law, LIKE IS CURED BY LIKE. Dr. Hahnemann commenced his labors with large doses, gradually by experiment, he advanced to the small and finally to the minimum dose. He proclaimed the result of his labors from a practical point of view. So long as the vital forces responded to the action of medicines, prepared in accordance with his scale of dynamics, and diseases were cured safely, quickly and pleasantly he was not troubled about the material quantity. He did not stop to enquire if it was reasonable or philosophical or could be investigated from a homœopathic point of view. Nor did he enquire if the immaterial and the psychological commenced where the tests of science failed to discover atoms. By his method of preparation he knew that the drug was attenuated, that surface was developed and by administering it in diseases he learned the fact that latent power had been developed and that the drug thus attenuated became "penetrating, operative and remedial." He came to the conclusion from practical demonstration, as do his followers, that the tests of the Almighty placed in animal organism far exceed in delicacy and power the most perfecs tests of man's invention.

But suppose we admit that there is a point where "the homœopathic

healing art develops for its purposes immaterial virtues of medicinal substances." When and where has such a point been discovered? Who has drawn the dividing line between the material and the immaterial? Are we to stop at the eleventh centesimal dilution because science fails to detect material presence in succeeding dilutions, and to conclude that, therefore cures effected by higher dilutions are within the range of psychology and irrelevant to homœopathy? THE REPORT says, THIRDLY, Science fails to demonstrate the presence of the drug in any higher attenuation than the tenth or eleventh centesimal, and therefore "the doctrine of the minimum dose a product of an error of judgment on the part of Dr. Hahnemann is unsound in principle, evidently non homœopathic; and being associated with homœopathy has greatly retarded its progress."

The logic of this proposition seems to be this: Material quantity is exhausted in the eleventh attenuation. But material quantity alone is homœopathic. Therefore all attenuations above the eleventh must be non homœopathic.

It is a fundamental principle of homœopathic law that the more points of resemblance there are between the effects of a drug and of a disease upon the living organism, the more homœopathic is that drug to that disease, irrespective of quantity or of materiality. If in the the process of preparation the material quantity is exhausted, so far as science can determine, the remedial power is communicated to the menstruum employed in the process, as seen by its effects upon organic life in curing diseases. Whether this remedial power be material or immaterial, or whether the remote cause of the disease upon which the remedial agent acts, too attenuate to be detected by scientific tests, working its morbid process upon the living organism, be material or immaterial, is of no consequence to the argument; the remedial power of the drug has been proved to be homœopathic to the morbific agent, and therefore the high attenuation of the drug can not be a bar to its homœopathicity.

Suppose we assume that material quantity is exhausted in the eleventh attenuation, and that here is the dividing line between the material and the immaterial; it must be admitted that cures are as positive by attenuations in the twelfth and upward, as by the eleventh and downward. But we must assume, also, that cures which are effected by dilutions above the eleventh are effected by a power which is immaterial, and which the report claims to be psychological or magnetic. We will assume, also, that if there is in any attenuation material quantity, however subtle, the test of science can detect it; and that every attenuation prepared in accordance with Dr. Hahnemann's rule, where the tests of science fail to detect particles of matter, must be above the eleventh; and also that all attenuations above the eleventh are non homœopathic.

Now, then, will the scientist gather portions of air outside of a building, inside of which are confined patients with small pox, and to the outside air of which some persons have been exposed, and from which they have contracted the small pox; and by their tests chemistry, spectroscope, microscope and mathematical calculation, inform us what is the material quantity, quality, etc., of that something, commingled with that air, which can propagate its species. If it cannot be detected we must conclude

that the attenuation is above the eleventh. Or, collect some air along a road, where, by the road-side grows an ivy vine (Rhus radicans) and where several, to my knowledge, in passing along the road, have been poisoned by the aura or particles of matter escaping from that vine, and give us the material quantity of those particles.

Three years ago I dissolved some grains of the centesimal trituration of musk in a glass tumbler, containing about a gill of water. In nine days I had used three tumblers in each of which had been dissolved like portions of musk. These tumblers have since been in almost daily use, passing from the table through soap and water to the closet shelf, and for thirty-three months when drinking water from either of them, musk could be detected.

Particles of musk must, unquestionably, have been absorbed by, and retained in the glass, and were constantly imparting particles to the air in the tumblers indefinitely less than the particles retained in the glass.

It is well known that a fox-hound can take the scent from a fox track, when it is two days old, and follow it. Does the dog scent psychological aura; or do not particles of matter rather come in contact with his delicate olfactories? What is the material quantity which fills the air in the musk tumblers, and along the fox track over the open field? Will the scientific tests determine? If contagious aura and floating atoms are so attenuate as to escape these tests, we must, *a priori*, place them above the eleventh centesimal, and in the minimum scale of dilution.

We see the developments of diseases and by their varying products learn to name and classify them; but the question of their materiality or immateriality remains unsolved.

When the tests of science come in contact with the infinitely more delicate tests of the CREATOR placed in animal organization, we must conduct our inquiry "through the gate of humility."

In reviewing this discussion, we conclude that the theory of dynamization is not unsound, but if the direction of Dr. Hahnemann be strictly adhered to in the process of triturations and succussions, the attenuation of matter may be carried to a great extent beyond the power of science to detect, and that it will still be "penetrating, operative and remedial."

That if the *prima causa morbi* is too attenuate to be detected by any known tests, it must be in the minimum scale of dilution.

That neither the large, small or minimum dose is involved in the question of homœopathy.

That the minimum dose is not unsound nor irrational, not extravagant nor unreasonable, not unphilosophical nor a product of an error of judgment; but that it is sound in principle as associated with homœopathy, and that it is more nearly allied to disease, in the minimum, than in the grosser material form.

XI.

Materia Medica.

BY D. K. MANDEVILLE, M. D.

Sir Benjamin Brodie in a course of clinical lectures delivered many years ago forcibly urged upon his students the good advice to "STICK to the *old-tried well-proven* remedies, and not to run after new remedies because they were, for the time in fashion.

This good advice though given many years ago, by one of a different school of medicine from ours, is I think fully as applicable *to us* of the present day, as to those to whom it was originally given; for it seems to me, that, take up whatever journal of medicine you may, you will find that the older remedies, well proven and tried as they were in the earlier days of the conflict between the new and old schools of medicine, and upon the use of which the new system reached its present basis of popularity and success, are now-a-days to a great extent ignored, and the tendency seems to be to make use of new and comparatively unproven remedies.

It has become in medicine as in many other sciences, the fashion, as the elder Dr. Miegs used to say, to "snap at a conclusion like a duck at a June bug," being led by our bias or inclination to any conclusion that may at the moment suit us the best; resembling the gay young lady and the parson in the old story; who both having heard that the moon was peopled, believed it, and telescope in hand were attempting to discover the inhabitants. . . The lady says, "if I am not mistaken, I perceive two shadows; they lean towards each other, and I have no doubt they are two happy lovers!" "*lovers* madam!" says the divine, who looked second: "oh fie! the two shadows you saw are the two steeples of a cathedral!"

This same *bias* has I say extended itself into the domain of medicine, and in no branch is this ability to see what we want to more manifest than in the study of meteria medica and the application of remedies in the treatment of disease. Here seems to have entered the point of the wedge that is to split our school into factions, and is liable at any moment to disrupt our organization. The potency question, difficult as it is, seems to me about as rediculous as the quarrel between the gay young lady and the parson, as to what each imagined they saw in the moon, and the parties on either side of the question seem as likely to harmonize as two persons, who looking through the *same* glass, at the *same* object, one sees a pair of lovers, and the other the two steeples of a cathedral.

The wants of our school at the present day are:

First—A reliable pharmacopœia, and honesty in preparing medicines.

Second—Reliable provings of new remedies, and accurate verifications of symptoms of remedies already proven.

Third—A careful weeding out of the rubbish of our materia medica.

As soon as these things are accomplished, it seems to me that this everlasting dose question must be settled and become a question of fact; a fact as Dr. Johnson says, "the hardest thing in the world to find."

During the past year I do not know of the thorough proving of a single useful remedy. Many have been recommended for use in certain diseases

and for particular symptoms. A few are, I think, worthy of note, and their symptoms of record.

The first of which I shall speak were a series of provings of the remedies most noted for their action upon the liver, and as producing the greatest flow of bile. Of all tested, it was found that Ipecacuanha produced much the greatest secretion, exceeding Podophyllin, Leptandrin and all the Mercurial preparations. Here we have a useful fact, and a hint for a similar or an antipathic remedy of great value to check in the one case or promote in the other the flow of bile as may be necessary. A fact worth remembering.

The second are some accidental provings of Iodoform, reported in a foreign journal by a Dr. Oberlacker. There were two cases, the first was a syphilitic woman who had taken twenty-four grammes in centi-gramme doses during a period of eighty days. All at once she was seized with weakness, vertigo and diplopia. After two days she fell into a profound sleep, followed in thirty-six hours by nervous exaltation, severe cephalalgia, delirium and disordered speech. This was followed by weakness and staggering when standing or walking; then the cephalalgia, vertigo and diplopia reappeared. The attack lasted for two weeks.

The second case reported was of a similar nature. The symptoms following in the same order. The sleep continued for five days, and was followed by debility and vertigo which lasted for five weeks. The quantity taken in the second case was five grammes.

Judging from the symptoms produced in these cases, Iodoform should be homœopathic to and useful in apoplexy, coma, headache, diplopia, and kindred complaints.

Another remedy which has made and is still making considerable stir among all the schools of medicine is Salicylic acid. It has been extensively recommended like all new remedies; but in the treatment of no other disease has it been found as useful as in general acute rheumatism. Here it has been used both in triturations and in tangible doses with equal success. The homœopathic reports are meagre, its use extending from the third decimal to five grain doses of the crude material. In the old school from five to twenty grains every two hours were given. The success attending its use is positive and unequivocal. The shortening of the disease was very marked. In the Boston City Hospital one hundred cases of all ages and sexes were treated with this remedy, giving complete relief to all pain in from one to two days. The average length of treatment was six days. Two cases only died, one from pericarditis and one from cerebral complications. Other hospitals report one hundred and eighty-one cases. The remedy failed in seven only. The Chicago Medical Examiner reports two hundred cases collected from various sources. The average length of treatment was 13.5 days. The time of reducing the pain 2.8 days, and the time for the reduction of the temperature thirty hours.

A grain or two of this remedy in a quart of milk, it is said, will keep it sweet a long time in hot weather, a fact worth remembering by mothers traveling with bottle fed babies. Its antiseptic properties are equal to, if not superior to Carbolic acid, while it is agreeable to the taste, and exempt from the villanous odor of the latter.

I clip the following from a foreign journal, in regard to Natron Benzoicum. A medical journal published in Vienna, states that the Vienna apothecaries are scarcely able to satisfy the numerous and increasing demands for this drug in cases of tuberculosis, which is being applied in the wildest extent and without consultation of medical advisers. The same journal prints an article by Dr. Kroezak of Inspruch the assistant of Prof. Rokitanski who first announced the value of the Nat. Benzoicum as a specific, and has continued its use with such remarkable success. Dr. Kroezak warns the laity against its use except under medical control, as it is only given by the profession in a *most attenuated* solution and by *means* of an *inhaler*. Seven weeks of inhalation several times a day are said to have produced results which would have been thought incredible beforehand.

The Benzoate of Soda is prepared by saturating a solution of Benzoic acid with a solution of Carbonate of Ammonia.

Dr. Bartholow sums up the old school knowledge of the physiological effects of Benzoin as follows. "Taken in considerable doses (a drachm) it produces some epigastric heat, increases the pulse rate and promotes bronchial and cutaneous transpiration."

"Recent observations have shown that Benzoic acid has decided antiseptic properties. It manifests the same power to prevent fermentations and putrefactions and to destroy minute organizations possessed by Salicylic and Boracic acids. The tinctures of benzoin were formerly used as expectorants in acute bronchial affections. They are now sometimes resorted to for the local treatment, by atomization of chronic laryngeal affections. The most important use however is in the treatment of foul smelling wounds, flabby granulations, etc."

From another authority we take the following: "Benzoin is a topical irritant and after absorption stimulates, the mucous passages especially the aerian membranes. It is adapted to chronic bronchial affections, but is seldom employed alone. As a fumigation to chronic laryngitis it has been recommended by Trousseau and Padoux.

This remedy has within the past few months caused quite a sensation in the old school ranks, as to its use in the treatment of diphtheria. It has been strongly recommended to the old school fraternity by the Russian minister at Washington, while the disease is decimating the towns and villages in Russia, in spite of the use of Benzoate of Soda or any other known old school treatment.

In this connection, among the absurdities of the theories giving rise to diphtheria we notice (to make a passing remark) in a western journal that the whole cause of the disease arises from eating potatoes, and an equally precocious writer in an eastern journal ascribes the whole trouble to the use of kerosene. . . Shade of Hippocrates what next!

Finally (not to extend our paper to too great a length), I notice one or two improvements in the preparation of our medicines. The first derived from the fact that plants are nearly all found to be soluble in Glycerine, and it is recommended to add it to our Alcohol as a solvent in the preparation of tinctures.

A second point I would notice is an improvement made in the preparation of our medicine introduced by Messrs. Boericke & Tafel, and

styled "tincture triturations," made by saturating sugar of milk with the desired tincture, and triturating until the alcohol is volatilized, and the powder perfectly dry. In this process the sugar of milk retains the fragrance of the medicine; its medicinal properties unimpared; and is the most convenient and ready mode for administration as stated in their circulur.

I have prepared medicines in this way for many years, and am happy to learn that they can now be obtained from Boericke & Tafel without the trouble and labor of preparing them myself; and I would strenuously commend this form of administering our medicine to this Society, as not only a convenient method, but one that is wholly reliable.

To sum up, as the lawyers say, the year has not been as fruitful of homœopathic advances as it might have been, had each of us applied himself to the best of his abilities; but we have reason to be thankful for what we have received, and to feel gratified at the outlook, and at the steady advancement made by our young school in comparison with those of maturer years; and we will close by saying that were the homœopathic system of medicine good for nothing else, it would, as another has said, "deserve the eternal gratitude of all mankind for reducing the doses of nauseating drugs, and compelling the vendors of them to make them palatable.

XII.

A Fragmentary Proving of Fucus Vesiculosus.

BY T. C. FANNING, M. D.

Having a patient who wished to try the virtues of Anti-Fat, I determined, before consenting to its use, to try upon myself the effect of large doses of the Fl. Ext. of Fucus Ves., which is supposed to be the reducing agent in the nostrum. I accordingly took May 2d, 10 P. M., 45 minims; slight pain about the large end of the stomach on waking in the night. May 3d, uneasy feeling of consciousness of stomach during the morning, nearer the pylorus; 10 P. M., took 43 minims. May 4th, 8 A. M., took 40 minims; 8 P. M., consciousness of stomach for a short time; (one-half hour,) 10 P. M., took 40 minims. May 5th, 7:45 A. M., took 50 minims, 12 M., weighed 145½ lbs.; 10 P. M., took 40 minims, slight feeling about top of head during afternoon, aggravated by stooping. May 6th, 7:45 A. M., took 55 minims; 10 P. M., 50 minims. May 7, 7:45 A. M., 60 minims; 8:15 A. M., transient pressing pain behind left ear; 9:30 A. M., continued pain in and around left eye, (a not unusual sensation for me), 10 P. M., 60 minims. May 8th, some pain in head on waking early, continued with a dullness after rising, urine cloudy, neither phosphates nor urates, with much calcic oxalate, mucus and vibrions, (3 P. M., urine saved in a cool place from 6 A. M.) Headache in and through head in the night. May 9th, 7:45, 60 minims; 10:30 P. M., 60 minims, headache especially in top

of head, aggravated by stooping or straining all day, (not uncommon). May 10th 7:45 A. M., 60 minims, head better. May 11th, A. M., 60 minims, P. M., 60 minims. May 12th, 10 A. M., 60 minims, 10 P. M., 60 minims. May 13th, 60 minims, morning, noon and night. May 14th, A. M., 90 minims, P. M., 90 minims. May 15th, 60 minims morning, noon and night, transient trembling of the hand this morning so as to be unable to write easily. May 16th and May 17th, 60 minims morning, noon and night, at 12:45 P. M., weighed a 145¾ lbs. May 18th, A. M., 60 minims. May 22d, hard ache in back of leg, when leaning forward to button my shoes. May 23d, the same. Some pain in region of right trapezius when turning head to the right or riding over a rough road. During the proving the mean daily amount of urea was increased nearly twenty per cent., *i. e.*, from 20.507 grms daily, to 24.369 grms daily, while if one might judge from the specific gravity, there was no increase in the total solids contained in the urine, and the daily amount of the urinary fluid was absolutely diminished. The increased urea elimination began immediately with the beginning of the proving. I dine at 1 P. M., there was consequently no loss of weight, but a slight gain.

XIII.

Stimulants and Irritants in the Practice of Medicine.

BY ELLA A. JENNINGS, M. D.

The word stimulant is derived from the Latin "stimulare to goad, to incite to action," a medicine which has the power to excite organic action of the different systems. The philosophy of stimulation is divided into diffusible or temporary, permanent, persistent, and cumulative, applied by physicians to agents that cause muscular contraction. They depend upon two factors, the nature of those agents and the properties of the tissue undergoing stimulation; the latter is the most interesting to us. The term irritability was used originally by Glesion to denote the contractility of muscular fibre when stimulus was applied. Haller thought that the muscle possessed two powers, the ordinary elasticity common to all animal fibres, and the contraction of voluntary muscles by the application of stimuli to the nerves.

Cullen perceived there was no essential difference between irritability and sensibility. He called all stimulants, whether they acted upon the muscular or nervous tissues.

Brown generalized the powers as Cullen did the agents, and merged sensibility and irritability into the one power of excitability. Almost every living tissue contracts under the application of stimuli. Especially pus cells, white blood and lymph corpuscles, and all masses of protoplasm, whether animal or vegetable.

Contraction does not always occur on application of stimuli to living tissue.

Prof. Rutherford's definition of irritability is "a tissue is irritable if, when irritated, it evolves energy," Dr. Sanderson says substantially the same, "the property possessed by every living structure of being excited to action by some motion or disturbance outside."

Stimulants are therefore those agents that unduly excite physical and mental action followed by inevitable depression or reaction.

The degree of irritability depends upon the proneness of the molecule of the tissues to energize, whether through heat, light, electricity, secretion, growth, nerve force or contraction. It is well known that cold lowers irritability, whilst heat increases it if gradually applied, if suddenly and the tissue evolve energy beyond a certain degree, destruction follows. If the end of a nerve be pinched it contracts, if pinched a second time it has no effect, the primary pinch having destroyed its power to contract or its irritability.

Chemical stimuli confirm the same rule. Strychnia at first increases the irritability of the excitor motor nerve cells of the spinal cord; if continued, its action diminishes and then destroys. Careful observation proves that those remedies that stimulate are usually followed by proportionate depression or reaction, that incapacitates from further action.

Cullen named the stages, stimulative action and stage of collapse. Hahnemann called them the primitive action and secondary effect. It cannot be expected in a short paper to even enumerate all the drugs that have a stimulative action, much less to enter specifically into their merits and effects.

Therefore we propose to confine our remarks chiefly to the most commonly used excitant or irritant, Alcohol, which is generally regarded as a stimulant. There are two aspects to this subject, one when administered as a medicine, temporarily or exceptionally, and when habitually used. It is seldom, if ever, required in the practice of medicine, especially homœopathic practice. As a beverage it is certainly not necessary to the support of life.

To determine if Alcohol is suitable as a medicine, we will show its primary and secondary effects; and here we may say to get at these effects is beyond a possibility with an individual who only casually studies the results. To ascertain what is necessary to this subject, as in all physiological discoveries, it needs more time and attention than the average practitioners can afford. Hence we refer quite largely to those whose authority cannot be questioned. Dr. Richardson, in his exhaustive treatise upon this subject, conclusively proves the positive injury and disintegration of every tissue of the human organism which Alcohol produces.

He spent many years of his life in practical experiments in the laboratory, patiently and diligently noting alcoholic effects upon the various animals, including the warm and cold-blooded species, also the human body in health and disease. He has given us his deductions from which we as physicians can extend our research. The experience of others is invaluable; we can build upon that which they have dug from the earth or evolved from the great chemical laboratory of Nature. Step by step, process by process, science has explored the mysteries of Nature, and we owe an eternal debt of gratitude to the discoverers of any great law—to Galileo, Harvey, Volta, Hahnemann, Mesmer, Davy, Daugguere Franklin,

Morse, Howe, Edison, and many others. Alcohol in its first effects as shown by Dr. Richardson, is, as the literal definition suggests, "to goad" on the functions beyond a normal degree of action which necessarily produces a sluggish or depressed reaction.

He discovered four progressive stages in the animal function under the influence of Alcohol.

First—Excitement in the circulating system with relaxation and injection of the blood vessels.

Second—Excitement and muscular inability or deficient automatic control.

Third—Rambling incoherent emotional excitement with loss of voluntary motion or muscular power, ending in unconsciousness.

Fourth and final—The heart begins to fail and death closes the scene.

In the first stage the normal temperature was increased in birds 1°, in animals ½°, in men 1°, sometimes 1½.° Second stage declines below normal. Third stage rapid decline, in birds 5°, in other animals 3°, in men 2½°. In this stage profound coma exists. In all stages except the first, Alcohol reduces the heat. This is the pivotal point, that it increases the circulation!! but the three subsequent stages more than counterbalance the increase of the first—in other words the reaction is three times greater than the stimulation. Any one doubting this fact can easily ascertain the truth at any station house, by taking the temperature of those arrested for drunkenness.

Fvery policeman should be taught to take the temperature, it would save many a life from being sacrificed through the ignorance of mistaking Apoplexy and kindred diseases for Alcoholism—in Apoplexy the temperature is above ninety-eight in alcoholism, (except first stage), below it.

Alcohol reduces the exhalation of carbonic dioxide at least one-third below the normal amount. If Carbonic acid be retained in the system, the blood, lung tissues, and the whole system must suffer physical and mental deterioration. Alcohol retards digestion, and prevents food, especially animal food, from being converted into living tissue. Not only is the action of the gastric juice interfered with, but congestion of the blood vessels of the stomach and perversion of all the natural functions is induced. Those who use Alcohol to even a limited extent, take less food. As food or nutrition is the only process by which we can repair the waste of the body, we cannot afford to decrease the natural demand, and supply its place with a harmful substitute—with a stimulant, narcotic or depressent.

The culpable practice of administering tonics for temporary effect (which is usually followed by depression of the nervous system) cannot be too strongly condemned by physicians who study cause and effect. The false strength imparted takes the place of the real rest demanded by Nature.

All monied banks exact payment, but none more rigorously or with greater certainty than the bank of Nature. Her drafts are always honored sooner or later, principal and interest must be met, and woe to the individual who has lived upon false credit.

Alcohol affects the nervous system, inducing epilepsy, chorea, idiocy, insanity and abnormal cerebral development which predisposes to mental or brain affections.

Patients are apt to think that Alcohol or Quinine benefit them, because they feel the exhilarating and stimulating effect. The secondary or depressed state is attributed to the need of increased doses.

When prescribed under the homœopathic law Quinine or China, as we term it, is one of the most valuable agents in removing disease; and, except Alcohol, Mercury and Opium in its various forms, there are none that do more harm. Every homœopathic physician knows this, for we daily meet cases of Quinine drugging. It simulates malaria so closely that we are often puzzled. Its effects, though opposite in character, tend toward the same results as Chloral, that frequently abused narcotic. The physician who uses or prescribes Chloral to procure sleep, knowing its cumulative action, disregards the laws of life and health, and takes the opposite course to procure the desired results. The amount of Morphine imported and used in America alone is enormous, we are emphatically a nation afflicted by nervous diseases.

In placing in ratio the evil that stimulants and irritants accomplish, Alcohol is chief of them all, then Tobacco, Morphine, Nux vomica, Cantharides, and many others. One of the most learned physicians of the old school expressed great delight that "women doctors" had demonstrated that Tobacco was not a necessity to the dissecting room. That he would give all he was worth if he could abandon its use. It irritates the nervous system, interferes with the digestive powers, perverts the function of the salivary glands, and poisons the systems of its victims. There are only three animals who use it. The black African goat, (a most disgusting and filthy animal), the Tobacco worm, and civilized man. Some medical men advise the use of Tobacco as an aid to degestion, ignoring the fact that much depends upon the salivary digestion; if this first act be imperfect, any physiologist or student of nature must see that the subsequent ones will not be normal. Dr. Taylor, who is high authority on medico-legal questions, says, "any poisonous substance like Tobacco, whether in powder, vapor or liquid, cannot be brought in contact with an absorbing surface like a mucous membrane, without, in many cases, inducing disease which they usually attribute to other causes." The use of Tobacco diminishes disintegration and demand for food, which is not a condition of healthy action. Its continuous use lies at the base of many diseased conditions, liver troubles, constipation, headache, irritability and gastric disorders. It would be well if physicians discontinued its use both professionally and personally. The effect of Alcohol upon the mind, when habitually used, is peculiarly destructive, no other drug of which we have any knowledge so singularly affects the brain and mental powers.

Other poisons and drugs have certain effects, Opium, Strychnine, Tobacco, Arsenic, and the virus of serpents produce well known results, but none affect the mind like alcohol.

When it concentrates upon the brain, the victim is transferred into a fiend and all the vicious qualities of his nature are increased ten-fold. The wife-beater, parricide, and brutal nature come to the surface; children, friends, honor, all go down before the alcoholic maniac.

The phantasms of his disordered mind are so hideous that he recoils in horror!!! Vast processions of fiends from the fabled Hades march in

countless numbers around him, he suffers indescribable tortures; sometimes he is relieved by death, more generally by elimination and absorption.

It is shown by post mortems in fatal delirium tremens, that large quantities of pure Alcohol are found upon the brain, revealing the smell taste and character of liquor taken. It is still Alcohol, it undergoes no change but remains the same destructive agent, whether in heart, blood, brain, lungs, liver, or kidneys.

Elimination through the kidneys, lungs, and pores of the skin, removes it from the system. The heart's action is visibly increased by its influence. The injury to the lungs is two-fold, the immediate action of the irritant upon the highly sensitive membrane, and through sympathy with the liver and stomach.

The lungs of habitual drunkards are friable, easily adhering and liable to inflammatory diseases and consumption. The kidneys continue to secrete Alcohol fourteen hours after the use of light wines. Lallemand and Perrin regarded the effect of Alcohol as most marked upon the liver and brain, when taken the usual way, but when injected into the veins it accumulates most largely in the brain.

Death by alcohol is due to its special action upon the nervous centres. When it occurs suddenly, it is due to shock to the nervous system. The use of Alcohol habitually, even in moderate quantities, renders the muscles flabby, soft and oily. Lacamor found one hundred and seventeen parts of fat to one thousand of blood taken from a drunkard's arm, the highest estimate of fat in healthy normal blood being eight and one-quarter parts to one thousand, and usually only two to three parts! This discovery accounts for the flabby puffed appearance of intemperate people.

Fatty degeneration of the heart liver and kidneys often results from Alcohol. For every life that Alcohol has saved, it has sent hundreds of thousands to the grave. If physicians would proscribe as well as prescribe it, less harm would be done—in other words tell when to stop as well as when to begin. Can we commend its use?

Knowing its physiological and patholigical action, that it disintegrates and destroys the tissues, that it causes hypertrophy of the heart, that it dilates the blood vessels, that it produces mania, through its effect upon the brain, sometimes idiocy, that it unfits its victims for health and happiness or reproduction of themselves. One of the most lamentable aspecss of Alcohol is its transmission, a man who takes alcohol to any extent ti unfit to become a father. Its peculiar affinity for water causes it to seek and absorb the watery element of the various tissues over which it passes. It produces a thickening of the membrane and inactivity of functional powers. Digestion being imperfect, absorption does not take place, commensurate with the maintenance of health.

Its insomnia or sleeplessness is a grave result. The person afflicted usually rising and taking a larger potion, or else resorting to opium to deaden his sensibilities which produces a congestive sleep. Alcohol affects the membranes of the brain first, then the gray and white substance. In the blood the plastic fibrine and corpuscles in the lungs the elastic tissues, in the heart the muscular and membraneous elements, in the liver

primarily its membrane, in the kidneys their connective tissues and membranes.

We can hardly find a moderate drinker whose genito-urinary organs are not affected, even the laity recognize this fact and ask with great concern can I get well its my kidneys that are affected.

The practice of stimulation instead of nourishment sends many a person to the grave, and its effect upon those who survive is to afflict them with disease against which nature wages warfare to the last. Biliousness can not be purged out, nor can nervous affections be drugged or narcotized into health! The pain may be silenced but it will burst out with redoubled force, and then we have not only diseased conditions but drug effects to combat requiring ten-fold more study, care and difficulty than in the outset. Pain is a wise monitor that bespeaks attention.

If we stultify ourselves by deadening it, we are working in the dark. One of the dangers of stimulants and especially of Alcohol is that an increased quantity is required to produce the same results.

We need no more bread this year than last to sustain life. But Alcohol and other stimulants and irritants are cumulative and require more to produce the same results. One of two sequences must follow, either to cease to produce the desired result, or by increased quantity to deplete the system and produce death. While physicians of the old school more frequently recommend stimulants and narcotics, for they know no better way out of the dilemma of disease to recovery, there is no excuse for any homœopathic doctors resorting to their use. We know a safer surer and more permanent way. If we do not, we have either studied to no purpose or failed to read the Organon understandingly.

Considering this as an age of stimulation, that among all nations both civilized and uncivilized stimulants are habitually used, and upon the increase; it is the duty of physicians and scientists to show their influence upon the health, happiness and morals of those who indulge in their use, endeavoring to correct their abuse. No greater field is open to physicians than to direct the laity against such abuse, whether by scientific research, experiment or the study of natures laws.

It is a glorious thing to be a student of nature. The body and soul largely depend upon the physician. To one who sees in the practice of medicine mere financial success, fame, and reputation, it must be very disheartening, for we meet with so many disappointments, make so many mistakes, fail so often to apply the correct remedy, have so many misgivings that another remedy should have been administered.

To a conscientious homœopathic doctor the question ever comes, did I do the best that I could? am I *sure* I gave the one remedy out of the thousands that will cover the case, and cure the patient. Might not Hahnemann have found a remedy more fitted to the case. Could he not have reached the vital current and stemmed the diseased tide before the flood of death set in.

To those of us who firmly believe in the law "Similia Similibus Curantur," it is a religion, and in our enthusiasm for it we are quite willing if necessary to sacrifice pecuniary advancement, the honor of being

a so-called "regular physician," the protection of antiquity and a license to experiment with security upon our fellow beings.

If the believers in the truths and principles discovered by Hahnemann had accomplished nothing more than to demonstrate the evils of overdosing, they would be entitled to the thanks and gratitude of all mankind. But they have done much more. They struck the blows which rendered medical intolerance harmless. And their continued success has enlisted the sympathies of millions of intelligent men and women. The practice and radicalism of the self styled "Regulars" of the old school, their mistakes of bleeding, blistering, vomiting and purging have been challenged and overthrown.

In the great battle for newly discovered truths and a demonstration of facts, there is much work for the reformer. With a determination to stand firm for the great principles of our profession, we look with confidence for that reward which is the legacy of all who labor for the alleviation of suffering, and the elevation and progress of the human family.

XIV.

Drugs Affecting the Organs of Circulation.

BY GEO. R. STEARNS, M. D.

The glory of the homœopathic school of medicine, that it is *the* science of therapeutics, its grand results and grander possibilities, resting on no mere hypothesis regarding the manner of drug action but upon the firm basis of a law—expressed in our well known formula *Similia Similibus Curantur*,—has no finer illustration than can be found in the class of remedies having their sphere of action in the circulatory apparatus. The modes of action here are so complicated and the elements involved in producing those actions so numerous and varied that there is room for an infinite amount of investigation, experiment and theorizing as to the precise manner in which one drug acts in one way and another in another to produce the same or varying results upon the organism. Still it is not without interest to note the different ways in which the circulation may be affected, and to try and understand how the observed effects of certain drugs may be produced. In the healthy condition of the human organism, the heart beats on with a certain definite regularity—subject to the slight variations incident to changes of external temperature, digestion, exercise, etc.—the blood-current is maintained at a state of equable pressure throughout the arterial system and the tone of the arteries, arterioles, capillaries, venous radicles, venules and veins is so preserved that all parts of the system are supplied with their portion of the the life-giving stream and the debris of waste material promptly removed. But this harmony may be interfered with by the failure on the part of any one or more of the many elements involved to perform its proper work in the proper manner.

The heart itself is a hollow muscle with its endothelial lining and serous covering. Though not in any sense under the control of the will, it has the striated texture usually characteristic of voluntary muscular fibre. It is supplied with nervous filaments from both the cerebro-spinal and the sympathetic systems and in addition to these certain special ganglia imbedded in the substance of the muscular structure itself, thus forming "little-brains"—so-called—for the proper direction of its action. The nervous filaments are mostly from the superficial and deep cardiac plexuses, which are made up of branches from the cervical and thoracic ganglia of the sympathetic, together with special branches of the pneumogastric, recurrent, laryngeal and spinal accssary nerves from the cerebro-spinal axis. The special ganglia above mentioned are connected directly with branches from the spinal cord. The arteries vary somewhat in their structure as they proceed from the great centre, the heart, toward the periphery and successively diminish in size. They preserve throughout their course the general structure of three coats—an inner endothelial lining, an outer covering of fibrous and cellular tissue and a middle layer of elastic and muscular fibre. This middle coat varies in the proportionate distribution of the elastic and muscular tissue, the former greatly predominating in the larger trunks, where there are only occasional fibres of involuntary muscular tissue, but in the smaller branches the latter comes to form almost the entire bulk of the layer. Farther on the outer coat decreases in thickness until the capillaries consist of little more than a continuous layer of epithelial cells surrounded by an imperfect network of muscle fibres, and still later this net-work is lost and there remains but the single layer of epithelial cells, forming a membrane which is still endowed with elasticity and probably contractility. These arteries are supplied throughout their course with branches from the sympathetic and cerebro-spinal systems of nerves, the distribution varying in direct ratio to the proportion of muscular tissue found in the middle coat. The system of nerves thus formed is known as the vaso-motor system and plays a most important part in regulating the circulation of the body, providing for local variations needed in the increased demand of certain parts, as in the various stages of digestion, and pathologically giving rise to local congestions, the chill and heat of fever and other similar phenomena. While this vaso-motor system works mainly through the sympathetic nerves, the origin of the force is to be traced back to the cerebro-spinal axis, though in what particular portion of the body the vaso-motor centre or centres are located is as yet undetermined. In addition to these regular vaso-motor filaments, many of the mixed nerves of sensory and motor powers have also some vaso-motor properties, and certain independent local ganglia have been found in the inner layer of the areries, the function of which is not fully understood and whose very existence is denied by some physiologists.

Such being, in brief, the anatomical review of the organs of circulation, the physiological rationale of their action is not difficult to understand, each particular element having its own special function to perform and each modified and affected by each of the others. The initial force and prime mover in keeping up the round of circulation is the action of the heat, drue in itself to a combination of causes. The muscular tissue of

the heart is endowed with a certain "irritability" or power of responding to external stimulus, independently of any nervous power whatever. Through this inherent irritability the presence of the vital fluid in the various cavities of the organ is sufficient, under normal circumstances, to keep up a regular succession of contraction and dilatation. But as this would be likely to be affected by any exciting or depressing influence from without, there is the additional control afforded by accelerator ganglia and other nervous supplies before described. Of these the greater part are occupied in stimulating the heart to proper and regular action, but the fibres from the pneumogastric have been proved to exert a special inhibitory or restraining influence, any excitation of those fibres causing a slowing and even cessation of the regular action of the heart, while any influence causing a depression in the power of the nerve allows that action to become very rapid and irregular. Another restraining influence is exerted by the tonicity of the general arterial system and the constant backward pressure of the blood current, which the heart is steadily striving to overcome. The influence of the vaso-motor nerves is here very apparent since if, by any failure on their part to act, the smaller arteries and capillaries are dilated and the blood stream allowed to flow too freely, this backward pressure is removed and the heart beats irregularly and tumultuously. So too, if, by excitation of the vaso-motor nerves, the arterioles and capillaries are contracted, the heart will be called upon to act much more powerfully to overcome the increased resistance thus offered. Thus it will be seen, that as the blood-pressure depends on the relation of the force of the heart on the one side and the resistance offered by the tonicity of the vessels on the other, this pressure will vary with any change in either element while the other remains the same or is modified in itself also. In this same way the action of the heart will become fast or slow, weak or powerful, regular or otherwise; the pulse takes on any of its corresponding multitudinous changes and the temperature, local or general, rises or falls according as these elements, which have been brought into review,are affected in one way or another by disease or drug action.

We come now to the question of *how* the circulation may be affected in any of these various ways and what drugs are considered so to affect it. In some few drugs the mode of action seems comparatively simple,—as depending on the action of some one of the elements involved,—in others it is more complex and contradictory, and in all it is subject to differences of opinion in theory and speculation. The muscular tissue of the heart, the accelerator ganglia which excite or the pneumogastric filaments which restrain its action, the muscular tissue of the arteries themselves or the vaso-motor nerves controlling their calibre, one or more of these may be affected to produce any of the numerous physiological or pathological results observed. The varying influence of large and small doses of the various drugs will produce the apparently contradictory symptoms noticed in the primary and scondary effects of the drugs under consideration.

Thus, for instance, the primary effect of *Aconite* is to cause increase of the heart's action, but the secondary effect is decrease of that action, with coldness and capillary collapse. The main action of this drug is on the cardiac ganglia, which are first stimulated and afterward rendered powerless

from exhaustion. Many authors claim an additional influence on the vaso-motor nerves but this is denied by others.

Agaricus produces a similar collapse by direct contraction of the capillaries, through the vaso-motor nerves, without weakening the heart's action as does *Aconite*.

Arsenic produces its effects also by affecting, in some measure, the accelerator ganglia of the heart, but unlike *Aconite*, for while the fever of the latter is simple and not symptomatic, no tissues of the body being affected, the former touches every tissue of the organism and its fever is always secondary or symptomatic.

Camphor works upon the heart centrically without affecting the vaso-motor nerves, and hence is produced the coldness of the surface, weak pulse, etc.

Gelsemium has a sphere more nearly allied to *Aconite*, though acting in a different way, since it diminishes the pulse-rate by lessening the irritability of the cardiac ganglia and the arterial pressure by diminishing cardiac irritability and vaso-motor tonus.

Belladonna has an action apparently as contradictory as it is complex. From the rapidity of the pulse it seems to lower the tone of the pneumogastric, and thus the heart runs riot under the influence of the untrammelled accelerator ganglia. The force of the pulsation seems to call for an excitation of the ganglia themselves, while the external symptoms and local congestions point to a paralysis of the muscular coats of the smaller vessels and capillaries, either, as some hold, from direct action on the unstriped muscular fibres, or, as is more probable, from paralysis of the vaso-motor nerves. That its action is mainly paralyzing and not exciting is rendered more probable by its action on the pupil, which it dilates by paralysis of the filaments of the third nerve supplying the circular or sphincter fibres, and not by excitation of the radiating fibres supplied from the sympathetic. Furthermore those drugs which produce paralysis of the sympathetic usually cause dryness of the mucous membranes, (so characteristic of *Belladonna*), while profuse secretions follow the use of drugs having an exciting influence on the motor nerves, since the glandular or proper secretory nerves are from the spinal cord, and not from the sympathetic.

The *Physostigma* or *Calabar Bean*, on the other hand, first stimulates the fibres of the pneumogastric and also the vaso-motor nerves, with consequent slowing of the heart's action and contraction of the arteries, followed by corresponding opposite results, from exhaustion of these two nervous supplies respectively. Its further alliance to *Belladonna* is shown in the contraction of pupil and profuse secretions which it produces by stimulation of the terminal filaments of the third nerve and of the motor nerve supplying the various gladular structures involved in its sphere of action.

Digitalis is another drug acting in great part on the pneumogastric, the power of which it diminishes so as to cause rapid and irregular beating of the heart. In large doses, however, it stimulates the pneumogastric so that the action of the heart becomes slow and feeble, part of this effect being thought by some to be due to direct action on the heart's muscle itself. At the same time the arterial tension is increased by stimulation

of the vaso-motor nerves supplying the smaller vessels, the heart being induced to act more powerfully to overcome the increased resistance in front.

Glonoine is closely allied to *Digitalis* in its sphere of action, since it acts on the pneumogastric and also on the vaso-motor nerves, but while *Digitalis* stimulates both these the *Glonoine* has the opposite effect, thus causing its characteristic beating and throbbing all over the body, from paralysis of the muscular coats of the vessels, with rapid and tumultuous action of the heart from removal of the resistance in front, and of the restraining influence of the pneumogastric.

Kalmia is still another drug producing slowness of the heart's action by influence on the pneumogastric, but the exact mode of its action is not so well understood.

There is still another class of drugs acting, apparently, on the muscular tissue of the heart, arteries and capillaries directly, with or without the intervention of any nervous influence. Foremost among these stands *Amyl Nitrite* which is proved to act directly on the muscular walls of the arteries, paralyzing them without influencing in any way the vaso-motor nerves there distributed, thus causing excessive flushing of all external parts of the body, the heart being affected only secondarily from the removal of the resistance in front.

The depressing effect of *Tobacco* on the circulation is thought to be due to direct action upon the muscular tissue of the heart, while *Veratrum Album* and *Veratrum Viride* owe their power, in part to a depressing influence on the substance of the heart, partly to stimulation of the inhibitory nerves of the heart, slowing and enfeebling the action of that organ and thus producing coldness and capillary collapse.

Though by no means exhausting the list of drugs most frequently used in the various disorders of the circulatory system, the few which have already been mentioned comprise most of those whose manner of working, in this sphere, of action has been determined with any degree of certainty. And though the intervention of so much of hypothetical reasoning debars such work from any really practical value, from the therapeutical point of view held by the symptomatologist, still it is not without its advantage scientifically to the educated physician, and the very uncertainty of it all, only brings out the more clearly the beauty of our homœopathic law.

For amid the ever varying theories of drug action, amid the differing interpretations of pathological phenomena, he still stands firmest and is assured of the highest degree of professional success who prescribes his remedies according to the old Hahnemannian formula SIMILIA SIMILIBUS CURANTUR.

XV.

Some New Observations on Peptone.

By Henry D. Paine, M. D.

The nitrogenous, or albuminous substances enter so largely into the composition of the animal tissues and fluids, that they require to be freely supplied from without, and it is easy to understand their importance as elements of food. Regarding this, Prof. Dalton in his "Human Physiology" says, "Since they are so abundant as ingredients of the body, their absence from the food is felt more speedily than that of any other substance except water. They have, therefore, sometimes received the name of 'nutritious substances,' in contradistinction to those of the second class, which contain no nitrogen, and which are found to be insufficient for the support of life." The modern French School of Physiology, whose work has been supplemented and perfected by both the German and English Schools, has shown that inanition and death follow very quickly when an animal is freely supplied with food having an abundance of fats, starches and inorganic materials, but containing no nitrogen; and the counter proposition has been equally well established. For when animals have been fed upon an exclusively nitrogenous diet they have maintained, not only life, but strength, for considerable periods of time. It is not to be understood that the nitrogenous principles are alone sufficient for an indefinite time, but the above amply illustrates their pre-eminence in the process of nutrition. Indeed a man may be starved to death by witholding Sodium chloride, much more slowly, it is true, but as surely, as if deprived of albuminous food. These albuminous substances exist under a variety of forms in our food; and we have next to consider how they are made available in the human economy. It has been pointed out by Pavy, that, "All the nitrogenous principles must undergo digestion before they can enter the system. Digestion, in fact, is simply a process which has for its object to fit substances for absorption into the system; and the nitrogenous principles are in a state to resist absorption, certainly to any material extent, until they have been liquified and transformed by the agency of digestion." It is the special function of the stomach to produce this transformation and reduce all albuminous bodies to the condition of a *single homogeneous substance, Peptone.*

The now classic case of Alexis St. Martin, the Canadian affected with a gastric fistula, was the keystone of our present knowledge of digestion and assimilation. The experiments of Dr. Beaumont in this case, conducted from the year 1825 to 1832, established the following important facts. First—That the active agent of the gastric digestion is an acid fluid, secreted by the walls of the stomach. Second—That this fluid is poured out by the glandular walls of the organ *only* during digestion, and under the stimulus of the food, *and it exerts its solvent action outside the body as well as in the stomach*, if kept in glass vials at the temperature of 100 deg. F. The same person, with the gastric fistula unchanged after an interval of twinty-four years, came under the observation of Prof.

Francis G. Smith of the University of Pennsylvania, who again made a series of important experiments, confirming and extending those of Dr. Beaumont. Frequently since this, similar experiments have been performed upon the lower animals, in which there have been established artificial gastric fistulæ, and it has thus been demonstrated that the gastric juice presents the same essential character in man and in the lower animals. The trustworthiness of Dr. Beaumont's investigations has been proved by the number and variety of similar experiments since performed. Through gastric fistulæ perfectly normal gastric juice may be procured. It is found to be a watery fluid, perfectly transparent, but having a faint amber tinge; its specific gravity varies from 1001 to 1010. It presents an acid re-action when tested by litmus paper. By repeated careful chemical examinations, the following has been established as its average composition.

Water	975.00	Composition of gastric juice in 1000 parts.
Free acid	4.78	
Pepsine	15.00	
Sodium Chloride	1.70	
Potassium Chloride	1.08	
Calcium Chloride	.20	
Ammonia Chloride	.65	
Calcium Phosphate	1.48	
Magnesium Phosphate	.06	
Ferreum Phosphate	.05	
	1000.00	

The most striking *physical* quality of the gastric juice is its acidity, and to this is owing its peculiar sour taste and odor. The gastric juice is the only digestive secretion having an acid reaction. The acidity, which is always strongly marked, depends upon the presence of a free acid. Although much controversy has been indulged in as to the chemical nature of the acid present, it seems now well established that the re-action is due to the presence of free *Hydrochloric* acid. In man the amount of this acid in healthy gastric juice is about two tenths of one per cent.

The most characteristic and important ingredient of the gastric juice is *Pepsine*. It is an organic substance, and was for a long while supposed to belong to the albuminous class of proximate principles. This is now denied by the best authorities. It exists in the gastric juice in the proportion of fifteen parts to every one thousand—Pepsine presents the following chemical re-actions. It is not precipitated by either the organic, or mineral acids, but is thrown down by the action of heat and by alcohol in excess. The former agent permanently alters it, so that it cannot again be brought into an active condition; by the latter, it is unchanged in its chemical qualities, and may be again dissolved in water, when it reacquires its original properties. None of these tests serve to distinguish pepsine from other organic substances, the only one capable of determining its presence, is its power of digesting albuminous substances when presented in an acidulated watery solution.

Pepsine is produced in the special glands of the mucous membrane of the stomach by the metabolic activity of their glandular epithelium. It

accumulates in the glands during the intervals of digestion, and may be extracted from the stomach after death. The theoretical considerations upon which manufacturers have based their processes for preparing the pepsine of commerce are fallacious, and the practical results obtained have been proportionately disappointing. I have records of a large number of carefully performed experiments in which commercial pepsines from the best German and domestic manufacturers have been used for conducting artificial digestion, and the results have been almost uniformly unsatisfactory. It has, however, been found that an acid infusion of the mucous membrane of the stomach gives a remarkably potent digestive fluid. Foster, in speaking of its efficacy, says: "The results are *essentially the same, whether the natural juice obtained by means of a fistula, or the above infusion be used.*" Having thus considered in detail, the nature and properties of both the acid and pepsine, it remains but to speak of the important role that water plays in effecting transformation of the albumens into peptone. Bodies closely resembling, if not identical with peptone, may be produced by boiling albumen in a Papin's digester at a high temperature and under great pressure; this would seem to indicate that the process of digestion is essentially a process of hydration and that pepsine and hydrochloric acid merely enable to be performed more perfectly, that which, to a small extent, can be accomplished without their aid. Analogy renders this more probable when we consider that the transformation effected in starch to convert it into glucose is known to be one of hydration. This, in a similar way, may be effected imperfectly, by boiling starch under pressure, while in the body, it is accomplished by means of organic ferments.

It is thus seen that *water*, *hydrochloric acid* and *pepsine*, are needed in the proper proportions to perfectly accomplish artificial digestion. That these *alone* are needed is proved by the fact that if an artificial gastric juice be made synthetically, containing these three only, it is intensely active.

The inorganic salts present in gastric juice are non-essential to the digestive process, and may be dismissed with the mere mention.

The secretion of the gastric juice is not continuous, it being excited by the presence of food. Even during the height of the digestive process, if the contents of the stomach be examined, there will be found to be but a small amount of fluid present, barely sufficient, indeed, to moisten the solid portions and give an acid re-action. Notwithstanding this small amount of fluid present at any one time, it is believed that three thousand grammes [between five and six pounds] is a fair estimate of the total secretory activity of the stomach during twenty-four hours. The activity of the digestive process is enhanced by the minute subdivision and constant motion of the solid matters submitted to its action. The comminution is effected by the cutting and grinding movements of the teeth, while a kneading and churning motion results from the muscular activity of the walls of the stomach. The result accomplished by this most wonderful mechanism is the conversion of all the albuminous substances known into peptone.

Such is the complicated nature of albuminous compounds, that their study has ever been attended with great difficulty. Some of the pronounced and accepted characteristics of albumen are its coagulability in neutral

solutions, by heat, the mineral acids and their salts, by tannic acid, alcohol and by ferrocyanide of potassium acidulated with acetic acid. Albuminous solutions when treated with the reagents of Trommer's test, cupric sulphate and liquor potassæ, assume a purple hue, which deepens on boiling. As regards our present subject, the most important feature is, that solutions of pure albumen manifest a marked indisposition to traverse animal membranes and are therefore generally described as practically indiffusible. After having been submitted to digestive action, however, albuminous substances present certain characters indicative of important *changes* which have been effected thereby. They are now no longer precipitated by either heat, acids or alkalies; they show a red color with the reagents of Trommer's test, which becomes purple if the test solution be added in excess, and they pass with great readiness through membranes. In short, a *new substance*, PEPTONE, or Albumenose, has been formed, possesing physiological properties entirely distinct from crude albumen-properties which look toward its absorption and assimilation. All physiologists agree that this change is effected, and regard peptone as the first step in the preparation of albuminous bodies for use in the economy. Bernard has shown that without this step, albumen is not assimilated, and such assimilation is physically impossible, as long as albumens remain unchanged. When the composition and use of the gastric juice became known, it was found that the juice obtained from the gastric fistula possessed the same action outside the body, as when performing its function in the stomach. The evident inconvenience of employing such a method for obtaining gastric juice led physiologists to attempt the preparation of a similar fluid by synthesis. We have already shown that the pepsine accumulates in the secreting glands during the intervals of digestion, and it was found also that it could be extracted by various means. The simplest method is to make an infusion from the mucous membrane of the fourth, or digesting stomach of the calf, and acidulate this to the proper degree, by adding hydrochloric acid. The fluid obtained by this means is identical with, and equal in potency to, the gastric juice as poured out from the walls of the stomach. This acidulated infusion, obtained from the calf, has been successfully employed in laboratories to effect artificial digestion. All forms of albumen have been experimented upon in this way, and all yield peptone, which is in every respect identical with the peptone produced when albuminous substances are digested in the stomach.

The very great usefulness of peptone, thus prepared, as an artificial food, was so apparent that many attempts were made to manufacture it upon a large scale. Although ingenious processes have been devised they were all found to be faulty, for the few which produced a satisfactory product were so expensive as to be impracticable. However, in some experiments where partial success has been attained, the practical value of the product was demonstrated, and the reports from some of the German Hospitals show that it proved remarkably successful.

Recently however, the details have been so perfected and the mechanical features so improved that it has been possible to produce, on a large scale, peptone absolutely identical with that manufactured by the human stomach. The steps of the process are as follows: First, a large receptcle

is provided, surrounded by water, kept at a temperature of one hundred degrees, F. In this vessel is placed an acid infusion, (prepared as already described), to which is added finely chopped meat. This mixture, kept at the temperature of one hundred degrees F., is agitated and ground by machinery which perfectly simulates the action of the human stomach. In the course of two or three hours, the meat is entirely dissolved, excepting an almost inappreciable residue. Chemical examination of the resulting fluid proves it to be highly charged with peptone. This fluid is carefully filtered and concentrated to the consistence of a thick syrup which protects it from further change, and in this form it may be kept indefinitely. Its use is indicated in all derangements, both functional and structural, of the alimentary canal. Practical experience has proved that it acts with an almost specific power in the acute gastro-intestinal derangements of children. It has been also found extremely useful in children who reject every other form of nourishment, even mother's milk. In the vomiting of pregnancy, it will be retained when all else is rejected, and as it affords so much nourishment in so small a bulk, it is most valuable in vomiting from whatever cause. It is most appropriate in ulcer and cancer of the stomach. In acute diseases, whenever it is indicated to sustain the failing strength, peptone may be used with the happiest results. Finally in chronic diseases, and in every condition in which an artifical nutrient is desired, this food, which is already digested, would seem to fulfil every requirement. Its administration may be, not only by the mouth, but by injection into the rectum, where it is very readily absorbed. Some experiments have been made by intravenous injection of peptone, as a substitute for transfusion of blood, with encouraging results.

During the past year, I have had a number of opportunities for testing the clinical applications of artificial peptone. A few of these cases I would be glad to describe, had not the foregoing remarks been so unduly prolonged. It will, perhaps, sufficiently indicate the different classes of affections in which its employment is likely to be followed by the most favorable results, to state that they include a case of exhaustion from hemorrhage, one of severe vomiting in pregnancy, one of prostrating diarrhœa, and one of marasmus. In *all* these—besides others of less serious character—marked and speedy benefit—though in different degrees, was apparent from the use of peptone. I would have used it much more extensively, but that the only source of supply of which I had any knowledge, has been, till quite recently, limited and uncertain. Owing, however, to the persevering endeavors of Messrs. James Gaunt & Co., [77 Varick St., New York], the process of manufacture has been greatly improved and facilitated, so as to secure a product of uniform quality and character, as well as—in time—in sufficient quantities to meet the demands of the profession.

Pure peptone, freed from all extraneous matters, is a liquid of light amber color and agreeable flavor, but in this form is liable to change. The samples furnished to me by Mr. Gaunt are in a concentrated form, which ensures their permanency, but requires considerable dilution for ordinary administration. Each ounce of the concentrated peptone represents from eight to ten ounces of meat.

XVI.

Regimen for the Sick.

BY H. N. GUERNSEY, M. D.

The term regimen signifies: "The *rational* and *methodical* use of *food*, and of *every thing* essential to *life*; both in a state of health and disease." In this short dissertation, we propose to consider the term in its relation to the sick.

The first point to be noticed is, if we are to consider the term as above, what does the word sick mean? We apply it here, as it is generally applied in homœopathic literature, to one affected with disease of any kind, any sort of disorder, to one not in health. To one in health we would be rational and methodical with food and with every thing essential to life, when viewed through the light and governed by the laws of sanitary science and of hygiene. When one is sick, how much more *rational* and *methodical* should we be in the use of *food* and of *everg thing essential* to *life*, when viewed from the laws of healing or of restoring the sick to health again. What is applicable in one of these conditions would not apply in the other, in scarcely any particular. No one would think of urging others, even though in health, to take more or other nourishment than they desire, well knowing that such a course would sooner or later produce indigestion and great suffering, and that it would be an infringement upon sanitary science and the laws of hygiene. When one is enfeebled by a disorder of any kind, how very irrational it would be to urge such a person to take sustenance against the forbiddings of the patient. Persons out of health cannot, as a rule, take much food. Their digestive powers are enfeebled to a degree corresponding to the disordered state of the vital forces. The assimilative function is equally deranged, if not more so, and often what has been badly digested has not been appropriated at all, and the patient is really made worse by the presence of nourishment revolting to those tissues, whose healthy office it is to drink in with avidity to the delight of the person. Medicines prescribed for persons under such regimen would be rendered unavailing to restore order to the disordered functions of life. Many a time have I been called in consultation by my colleagues in cases where their failure to cure could be distinctly traced to a faulty regimen, under the false notion that nourishment must be forced in order to keep up the strength of the patient. Not very long since I was called to a case of cerebro-spinal meningitis. The young man was unconscious most of the time, yet he had been mechanically taking nourishment day and night about every two hours, beef tea, oat meal, corn starch, and the like, for some days. I found him wholly unconscious, the abdomen distended and hard, the tongue dry, and in a state utterly precluding any kind of nourishment but water. I remonstrated at the treatment he had been receiving, advised a little water only, and the remedy most similar to the malady as nearly as I could make it out. The next day I found that the medicine had been given faithfully; but the same stuffing process as heretofore had been kept up, so very con-

fident was the doctor that sinking and death would occur speedily without *nourishment.* Of course I retired from any further responsibility in the case, when another counsellor was called, and, in two days more, death closed the scene. A case of typhoid fever occurred not long since where death was pronounced inevitable, and beef tea, brandy, milk punch, bathing with whisky, etc., were faithfully administered for over two weeks. When I arrived to give counsel, I was advised beforehand not to give any encouragement, because the patient would surely succumb to the disease. I found the tongue and mouth very dry, the lips dry and parched, great desire for cold water in quantities, great prostration, and great dread of motion. I saw but one chance for her life and that was to stop all nourishment, but water *ad libitum*, and give Bryonia. There were three staunch so-called homœopaths with whom I had to consult, all of whom refused to agree with me. The husband was called to decide between certain death with the irrational regimen, and the prospect of life with the rational regimen accompanied by the proper remedy to cure the case. He at once requested that I should take charge of the case and that the other three doctors should retire. She got Bryonia every two hours and as much water as she chose during that night, *nothing else*, and the next morning she was stronger and feeling better than she had for a week. She made a rapid recovery on Bryonia and cold water, and when she desired milk and other nourishment of a rational kind, they were given her—but no stimulants. So I might write a lengthy paper relating similar experiences with my erring brethren; but I forbear and will confine my pen to principles that may govern the regimen for the sick in all cases. These principles are clearly and unmistakably laid down by Samuel Hahnemann in his "Organon of the Art of Healing," see section 261, which I quote: "The most suitable regimen in chronic cases consists in removing every thing which might impede the cure, and by bringing about an opposite state, where it is necessary; by recommending innocent cheerfulness, exercise in the open air, in almost all kinds of weather (daily walks, light manual labor), aliments that are suitable, nourishing, and free from medicinal influence, etc., etc."

"Removing every thing which might impede the cure"—of this it will be perfectly proper for the physician to decide. "Aliments that are suitable, nourishing, and free from medicinal influence, etc., etc.," of these too no one can so well decide as the physician. For instance, if the patient has been accustomed to the moderate use of tobacco, and it seems to do no harm, the disturbance to the system would be greater to proscribe than to continue it. So of coffee as a beverage, when it seems to be harmless; so of any other medicinal article of diet; but no new article possessing medicinal influence should be allowed. See also section 262 which I quote: "On the other hand, in acute diseases (mental alienation excepted), the preservative instinct of the vital power speaks in so clear and precise a manner that the physician has only to recommend to the family or nurses of the patient not to thwart nature by refusing the patient any thing he may long for, or by trying to persuade him to take things that might do him injury."

"Not to thwart nature by refusing the patient anything he may long for, or by trying to persuade him to take things that might do him injury."

These few lines speak volumes in favor of restoring the sick to health again. "Not to thwart nature by refusing," etc. How often, oh how often, do we find patients desiring nothing but water, pure cold water; and how often are they refused this most refreshing restorer of health, given by Heaven, one of the greatest blessings with which the sick can be favored. "Or by trying to persuade." This is too full of meaning and should be made to ring in the ears of every physician, of every nurse, and of every parent in the land. Full many a father, mother, and child, has been sent to eternity by this system of persuasion, when the patient felt that the form of nourishment taken through persuasion was doing an injury.

When a person is ill, essentially ill by the invasion of some morbific influence, nourishment is not going to cure; a medicine should then be employed whose pathogenesis must fully correspond with the pathogenesis of the morbific influence that is operative. If one be very weak, very much exhausted, this state with its modality becomes a most important factor in finding a curative remedy. No stimulant, no sort of nourishment but water, or milk, if the patient desires it, will avail. For instance: I was once called in council where there was great exhaustion, and the patient felt that she could not survive from mere weakness. Questioning the patient, I found that the least exertion, turning in bed, taking a sip so water, rising to urinate, etc., was attended with threatened dissolution of great was the exhaustion. Nourishment had not been of the least avail in this case; but Arsenicum very high brought speedy relief and a perfect cure. Where there is weakness, or a sensation of weakness, we must know all the attendant circumstances of that weakness, and then find its similimum in our Materia Medica; this is one of the essentials to life, in fact *the* essential to life claimed in our text, then relief comes and a cure follows where a cure is possible. Nearly thirty years ago, a fever called putrid fever prevailed most fearfully in the twenty-third ward of this city, where I was then practicing. Great and rapid exhaustion, much distress in epigastrium, with nausea, very profuse and watery diarrhœa running off almost constantly, and unconsciousness, soon terminated fatally nearly all cases that came under the care of the old school physicians. Iris vorsicolor promptly cured all my cases, without any nourishment other than cold water, till other nutriment was desired by the patient, simply because Iris ver. answered to the law of cure, answered to this kind of fatally prostrating disorder, and its attendant symptoms. Unless we prescribe strictly according to the law of cure we are not healers—not physicians—not administering regimen in accordance to the laws of restoring health to the sick—nourishment never cures, it simply nourishes the convalescent to the natural state of existence in flesh and strength, after the cure has been effected by medicine. Nourishment often places the patient beyond the means of cure by medicine or other means. We must not be in a *hurry* to feed our convalescents; but we must let them have their way about the matter of eating, and never *persuade* them to take nourishment. They must first sleep well, because those who eat before sleeping will not do well—it is almost always necessary for them to sleep first, then they begin to talk about eating, but sleep again without doing so. Finally after a while, a few days perhaps, nourishment is taken with a relish, and

they sleep and eat, and eat and sleep, and in this way convalesce rapidly, if the nourishment be rationally and methodically administered.

When visiting the great London Hospital in London this last spring, I was much pleased to learn of their great advancement in the way of dietetics. The tons and tons of beer, ale, wines and liquors that were supplied their patients a few years ago, are now almost entirely displaced by more than their equal amount of pure alderney milk and cream; and the Governor of the Hospital, who has been there forty years, assured me that the results of this change were a decided lessening of the bills of mortality, a more speedy convalescence and fewer relapses, besides a great saving of the funds of the institution, to them a most important item—all this in a country whose climate seems to predispose to stimulants. How much more should we emulate their example in the use of milk in this climate where stimulants cannot be borne as in the old countries of Europe.

Regimen for the sick then most rigidly and positively demands the *rational* and *methodical* use of *food* and of *every thing essential* to *life*. The most *essential* of *all* to the *sick* is the *medicine* that will cure, then nourishment rationally and methodically administered.

XVII.

A Brief Report of the Epidemic of Diphtheria in Geneva and Chemical Analysis of the Water in Geneva, N. Y., 1878-9.

BY N. B. COVERT, M. D.

The recent visitation of an epidemic of malignant diphtheria upon the village of Geneva, N. Y., commencing with sporadic cases, in June, 1878, and continuing up to August, 1879, has led both physicians and scientific men to enquire, if possible, into the cause of the epidemic, and into the sanitary condition of our village.

The following are a few of the facts:

First—The village has no regular system of drainage.

Second—It was found that a large number of the dwellings have no drains whatever.

Third—That the privy vaults throughout the entire village had been sadly neglected, and many were declared nuisances, and ordered cleansed or removed with contents.

Fourth—It was claimed that the water was bad in the extreme, and that the wells were affected directly from sewage, and thus rendered unfit for use.

Fifth—That a careful analysis of the water from a number of different wells, in different localities of our village, proved that the claim was correct.

Sixth—That the White Spring water furnished by the Geneva Water Co., was found to be good and in every respect the purest water.

Seventh—The conclusion arrived at after a careful record of all cases reported to the board of health of our village, are as follows, viz:

Whole number of cases of diphtheria reported to the board of health 448
Number of deaths..... 80
Percentage of deaths..... 17.9

Of this whole number of 448

	No. deaths.	Per cent.
373 used well water.....	60.....	16
63 " White Spring water.....	12.....	19.5
3 " filtered rain water.....	3.....	100
9 " boiled well water.....	5.....	50.5

The question of drainage has also been carefully examined, with the following results:

Number of cases occurred

	No. deaths.	Per cent.
308 when there were no drains.....	52.....	17
128, covered tile drains, without trap.....	22.....	17.4
12, " " " with trap.....	6.....	50

In this report I have only wished to show the facts as regards the use of water, and the number of deaths occurring under each kind, and also the facts as they occurred as regards the drains.

I would now submit the chemical analysis of eighteen specimens of water from different portions of the village of Geneva, made by Prof. A. A. Benneman, of Cornell University, Ithaca.

"Several months ago my attention was called to the prevalence of diphtheria in Geneva. At that time I was engaged upon an investigation into the sanitary relations of the air and soil in Ithaca and vicinity, and in hope of shedding some light upon certain obscure points in this work, I was led to examine several samples of water from Geneva. The results were so striking that I obtained other samples through different parties, and also made a visit to Geneva to collect a number.

Apart from the bearing of my results upon the original question, it has seemed to me that they may be of interest to your readers, and may, perhaps, shed some light upon the origin and prevalence of the epidemic. I give in a tabular form the results of my examination of eighteen samples.

Eight of these were collected by myself in Geneva, on February 1st, but as the day was cold with a driving storm of snow, my opportunities for personal inspection of different localities were exceedingly unfavorable.

My deductions then, are drawn from the chemical results and from such data as I have been able to procure from friends in Geneva. Samples fourteen to eighteen inclusive were sent me by Inspector C. P. Waters at my request, and the remainder were furnished by friends to whom I am much indebted for assistance in this work. All of the samples were obtained in bottles cleansed in my laboratory and forwarded for the purpose to Geneva.

No.	LOCALITY.	Date.	Parts in 100,000		Grains in (U S) gallon		Galls. equal in Chlorine to one of Urine.	Nitrates.
			Free Ammonia.	Albumenoid Ammonia.	Chlorine.	Solid Matter.		
1	White Spring	Jan'y 11	.0030	.0044	.21	13.6	1142	Trace
2	Castle and Main Street pub. pump	" "	.0060	.0115	14. 4	.....	16	Much
3	Main Street	Jan'y 25	.0054	.0176	6.60	47.1	36	"
4	White Spring	" "	.0034	.0043	.29	18.2	827	Trace
5	Castle Street	Feb'y 1	.0096	.0553	5.87	61.3	40	Very Much
6	Union School	" "	.0020	.0075	4.73	36.5	50	Trace
7	Washington Street near Park	" "	.0023	.0035	5.89	46.1	40	"
8	Courtland Street School	" "	.0029	.0110	.65	22.5	445	None
9	Castle Street	" "	.0773	.0285	9 74	79.5	24	Enormous
10	Washington Street near Cemetery	" "	.0095	.0125	3.52	34.3	68	Much
11	Washington Street near Cemetery	" "	.0097	.0220	3.07	.....	78	Very Much
12	Castle Street Cistern	" "	.0123	.0097	.08	4.77	2891	Trace
13	North Main Street	" 22	.....	.....	7.09	.....	33	"
14	Castle Creek W. of Exchange Street	" 25	.0037	.0209	.49	32.4	578	None
15	South Exchange Street	" "	.0022	.0258	22.3	117.27	10	Much
16	Cemetery Creek W. of Exch'g St.	" "	.2655	0 94*	2.23	18.09	74	Trace
17	South Main Street	" "	.0084	0.360	12.61	93.45	19	Very Much
18	William Street	" "	.0048	.0099	7.97	52.12	30	Trace

Column two and three respectively contains the amount of free and albumenoid ammonia, which indicate presence of organic matter or of the products of its decomposition. The former indicates previous contamination, the latter that which is present at the time of analysis.

Albumenoid ammonia is more serious in its indications, representing as it does putrescible matter which may yet undergo decomposition. By common consent among chemists the proportion of this form of ammonia yielded by a sample of good water should not exceed one-hundredth part in one hundred thousand (100,000). This quantity, small as it is, can be determined with perfect accuracy, as can much smaller quantities indeed, and the indication of these minute proportions are sufficient to distinguish a good water from a bad one.

Many samples in the table are condemned upon this standard, as will be seen upon inspection.

The capacity of the soil for absorption of ammonia and for abstraction of organic matters, such occur in the solid state in water, is sufficient in some cases to reduce sewage water to a condition of apparent safety. Yet filtered sewage is not a material which any one would knowingly drink, and it becomes important to apply some collateral test to indicate sewage contamination in such cases. Of all the abundant ingredients of sewage there is none which is so little liable to be absorbed or retained by the soil as the element chlorine, one of the ingredients of common salt. The latter is universally present in sewage, and its proportion may be determined by means of this ingredient chlorine, which is commonly spoken of by itself although merely the representative of common salt. Waters of country districts, away from the vicinity of dwellings, are remarkably free from this element chlorine, rarely containing more than one grain per gallon, unless in the vicinity of natural sources of salt.

When this limit is not passed by the purer waters of a given section, it may be taken as a test of the presence of sewage in waters coming from the vicinity of dwellings or other possible sources of contamination. Of

all forms in which chlorine is rejected, the most abundant by far is that of urine which leaks from privy vaults, and saturating the soil, is taken up in time by the waters which drain from it. Other sources, such as kitchen slops, or rejected meat brine, are trifling in the aggregate when compared with the source just mentioned. We have then in chlorine a means of estimating the previous contamination of water, provided always that no natural source be near.

In many cases, as the table will show, a high proportion of chlorine is accompanied by high figures indicating organic matter as well; but where this is not the case, a high proportion of chlorine is in itself so suspicious a fact with regard to the history of the water that it cannot be regarded as proper for drinking, however harmless it may be. Contamination may cease to be arrested by a soil which has become overloaded with filth, and the water which is to-day only potentially bad may be actually so a month hence.

Referring to the table, it will be seen that numbers nine and sixteen are bad in every sense, having both free and albumenoid ammonia in high proportion, with chlorine as well, above the normal limit. The latter, from Cemetery Creek, gives a fair idea of the nature and composition of diluted sewage which has been subject to little absorption in the soil. Numbers five, eleven, fourteen, fifteen, sixteen, seventeen, are also of bad quality, differing in free ammonia, but showing a high proportion of albumenoid ammonia. A comparison of these figures with those of White Spring's water, a perfectly good sample, at the head of the list, will readily indicate the defects of the samples named.

Numbers five, nine, ten, eleven, twelve, seventeen, eighteen were taken from houses which had been severely visited by the disease, and attention was directed to the taking of these samples in this way. These are the only wells upon the list taken from premises which were visited by the disease. The remaining samples were taken for comparison, in the determination of another question. The two samples of White Spring's water, number one and four, were taken two weeks apart, and the striking accord of the analysis indicates their accuracy. What makes this accord more striking also, is, that I was not aware that they were identical at the time of making the analysis, nor until the results led me to suspect what was confirmed when the record was sent me.

The cistern water number twelve, is comparatively rich in free ammonia, as is all rain water, and the absorption of ammonia by the soil cannot better be illustrated than by a comparison of this sample and number one. The remaining samples are not rich in either form of ammonia.

Coming now to chlorine, we find it (in column four), generally high, sometimes enormously so, when it is remembered that one grain per gallon is the limit of good water—White Springs water with twenty-one-hundredths of one grain is a good illustration.

In five, nine, fifteen, eighteen, it is very high, and the ammonia is correspondingly so. Here the soil has failed to remove the more dangerous constituents of sewage, and the high proportion of chlorine is easily explained.

In two, three, six, seven, eleven, twelve, eighteen, we have much chlorine and less ammonia, indicating more perfect filtration of sewage in the soil.

In one, four, eight, twelve, the chlorine is low and the water is good in all respects. The minute quantity of chlorine in eight is striking when the location of the well on the outskirts of the village is considered. Also we have reduced proportion in ten and eleven. Castle creek seems to carry such a quantity of water as to dilute very largely all sewage that may enter it. Cemetery Creek, less in its flow, is more contaminated.

Column seven contains results of qualitative test for nitrates with ferrous sulphate—generally an abundance of nitrates indicates previous contamination.

Column five contains proportions of solid matter, not of special interest here, although it will be observed that the numbers follow the proportion of chlorine or common salt with a certain accuracy.

Column six contains the number of gallons of each water which would contain chlorine equivalent to one gallon of urine. Admitting that all chlorine in the water is introduced by urine, we have here a rough means of stating the previous contamination. The numbers are obtained by dividing each number of column four into two hundred and forty, the number of grains of chlorine in a gallon of average urine.

Number fifteen, it will be seen, contains chlorine in each ten gallons equal to one gallon of urine; while White Spring and cistern water require from one thousand to two thousand gallons to yield the same quantity. Samples of sewage taken from the sewers of Boston gave in a majority of cases less chlorine per gallon than this sample fifteen.

The matter of greatest suggestiveness in these results seems to be the bearing of the chlorine question. The general high proportion of chlorine indicates a soil strongly saturated with sewage, perhaps for many years. That the proportion should be reduced as we approach the suburbs, only adds to the meaning of the first remark.

Bad water, as indicating the foulness of the soil, is an indication also of foul air within the pores of the soil, and this is the graver case. No certain connection can be traced between bad drinking water and the disease of diphtheria, so far as I am aware; but it has long been known to be peculiarly dependent upon poisoning the air in or about the house. When the soil is permeated by foul air made so by decomposition of foul matter within it, this same air enters the walls of every house, slowly contaminating the air of cellars, living rooms and bed-rooms. Plastered walls are as porous in this respect as sponge, and a room may be entirely ventilated by simple transfusion through the walls under certain conditions.

Moreover, the passage of air through and above the soil is much more easy than that of water, and the effects of local contamination are more far-reaching. It is not necessary to show a source of contamination upon the premises where the disease occurs in this case; the air may be affected for considerable distances by a single centre of corruption. To some such cause we may in part ascribe the violence and duration of the recent epidemic. Contagion is the most direct cause of progression with the disease undoubtedly, but it is to the aid of contaminated air that much of its certainty is due.

To remedy the evil, we must begin with the soil, realizing that it, like all porous substances, has a limit to its absorbing and disinfecting power. Water-tight receptacles for filth, well ventilated, strong drains, and traps absolutely gas-tight, are the means at command, but their use must be universal. The subject is one of much interest, and is worthy of fuller investigation than it has been possible for me to give to it; but I shall be glad if these efforts shall prove in any way to throw light upon the question which is of deepest interest to your citizens."

XVIII.

Pseudo-Colic and Some Other Forms of Local Spasms.

By JOHN C. MORGAN, M. D.

Peculiar cramps of the abdominal muscles sometimes occur, of which the following are examples:

Diagnosis from spasms of the intestines is not always easy, the most careful expository palpation being required. The upper half of the abdomen is, according to my observation, the most frequent site of this condition. Especially the short bellies of the rectus muscle. Some of the cases of so-called "protrusion of the distended transverse color, like a pad," are like *Case First* unquestionably of this nature. As in many other cases of disease, mistaken diagnosis does not prevent the homœopathic cure by Belladonna, this being the remedy for such cases.

Case Second—Another locality in which I have met with this symptom is on the boundary between the umbilical and the left hypochondriac regions, in a little spot no bigger than the end of a finger, leading to the suspicion of renal colic, but not changing its position for hours, during which unsuccessful use was made of hot sitz baths. *Nox-Vom. Lycopodium, it id omne genus;* the painful fibres distinctly felt elevated beneath the skin. *Ferrum phos.* would probably have done better, but he was cured by resorting to a purge, followed by Quinine.

Case Third—Another similar case presented a considerable lump in the corresponding spot on the right side, and cured after a homœopathic physician not succeeding by the *same means*. In this case, however, an intussusception of the *colou* was probably present.

Case Fourth—In the region of the gall-bladder severe spasms, not followed by escape of gall-stones; of habitual occurrence, resisting *Nux. vom. China, Lycopodium*, were speedily cured by *Ferrum phos.* [30]

Case Fifth—The same day I relieved another habitual case, due to indigestion and gastric spasms. After failure of *Lycopodium* and *Nux. vom.* Locality, the epigastrice region.

Case Six—I was called at night by a young man in slippers, who mysteriously asked me "to see a party" who was very ill with cramps in the hands. On the way, he explained to me that the attack accurred immediately after sexual intercouse. This robust young woman I found

suffering severely with spasms of both flexors and extensors of the hands, the former worst. She stated that she had retired feeling below par on account of slight indigestion. No other reason appearing. Drugs seemed *Nil.* Ordering a basin of hot water, I submerged the hands, and with prompt relief, the cramps entirely subsided, by continuing this treatment a half hour.

Case Seventh—A stout and florid middle-aged man had morning diarrhœa; took China ^{2c}. Better, but cramps supervened, beginning at the feet and extending to the chest. A single dose of *Cuprum* ^{2c} speedily relieved, and *Sac-Lac* soon finished the treatment. This patient suffered severely, being obliged, during exacerbations, to rise and stand on his feet for relief.

Case Eighth—Another stout, and florid man, taken in the night with cramps in the calves, also in the leg muscles, coming on in paroxysms, found relief after the same remedy, Cuprum, (*Nux. Vom.* also Sulph., in old people, often cures cramps in the calves.)

Case Ninth—A teething child had intermittent spasms of the great toes, inverting the feet, with outcries during exacerbations, promptly relieved by *Gelseminum* ^{1m}.

Case Tenth—Another, entirely similar, except that the morale was positive, (the former being negative) got worse under the same remedy, and died of Cerebal symptoms.

(*Belladonna* might have done better.)

XIX.

Dead or Alive.

BY C. BRUCHHAUSEN, M. D.

"To be or not to be" after this terrestrial existence, is a question on which ancient and modern philosophers have disagreed. A like dilemma attaches even to the last stage of man's physical existence, baffling in some instances the whole medical faculty to decide. I refer to the difficulty of distinguishing real from apparent death. Do we not read, or hear, (perchance witness) of corpses in private apartments, at the morgue and in the dissecting room ready to be disposed of as such, having come to life again? Have we not seen persons seemingly dead, lying only in trance for days and weeks? Have not even coffins reopened revealed the honors of premature burial?

This uncertainty or insufficiency of signs of death, generally acknowledged, constitutes a question of considerable, yea vital importance to the individual concerned, as well as to the family of the deceased, on which I need not to enlarge.

Living sepulture has been deemed an awful fate among civilized nations of all times, and various expedients have been resorted to, to avoid it.

As the surest preventive, dead-houses have been established at the cemeteries of the larger European cities, especially in Germany, where the deceased are deposited for a certain time, under strict guard and guardian, with all provisions for a possible revival. These institutions, however, require no little public care and expense.

Recently Dr. Rosenthal, a professor in a Vienna College, mentioned in one of his lectures, that science finally had succeeded to discover a new means, simple sure and easily applicable, by which real and apparent death may be discerned in *electricity*.

I am not aware that this reagent has become known for that purpose, and will give the substance of an article on this subject, which appeared some time ago in the "Islælotische Wochenschrift," translating from German.

The *test* rests on the following observations: Every corpse, immediately after death, is easily excited by the electric current; not only the motions of respiration, a heaving and relaxation of the chest, but even facial expressions, as of pain, laughing, etc., can thereby be produced. This high excitability lasts only one hour, thence it decreases, and in persons who have died of a protracted chronic malady, it ceases in two hours, in others it is extinct in at most three hours. On the contrary in individuals only apparently dead, as in a swoon, this excitability continues unimpaired, and thus the electric current furnishes a reliable criterion for determining whether there be still life in a body or not.

The *modus operandi* is quite simple, so simple that it can be performed by any intelligent layman. The ends of the wires, connected with the electric battery, are somewhat pointed and inserted under the skin of the body, though avoiding veins. The insertion is usually made at the neck, at the foot or on the hand. If the muscles re-act after the lapse of three hours, reckoned from the setting in of lifeless condition, by contracting, it is a sign that death is only apparent.

Dr. Rosenthal relates *a case of his own experience* as follows: A nervous young woman, after a violent outburst of passion, suddenly fell down with a scream and lay so with face deadly pale for one and a half days. Of the physicians called one had declared her dead, the other abstained from a decided expression of opinion. The dropping of sealing wax and other resuscitatives had been used in vain. Preparations were made for burial. The Professor accidentally learned of the occurrence and went to examine the lifeless woman. No palpitation of the heart, no pulse, no breathing noise perceivable, only a slight movement of the abdominal walls seemed to indicate a remnant of life still existing.

Dr. Rosenthal applied his electric apparatus, at the effect of which the body showed evident re-action. He declared the woman only apparently dead, recommended warm cloths to be applied, exposure to fresh air, and the instillation of black coffee mixed with a little brandy.

The next day the person revived, after the expiration of forty-four hours, and recovered gradually consciousness, language and motion. Restored and interrogated; how she felt during her asphyctic state, she said: At the beginning she had been unconscious, the consciousness returned, and she had seen and heard everything passing around her. In spite of witnessing the preparations making for her funeral, she had been unable

to utter a sound, or give any sign of life. Her condition was similar to one suffering with heavy dreams (nightmare) or narcotism.

While on this chapter I will mention another means of ascertaining death, probably not familiar to the common practicioner, suggested by Dr. A. Montverdi: *Injection of Ammonia.*

In a body still alive it causes a spot of deep red or purple color; after death, no change of color, or only a darkening of the skin's natural color, ensues. Injected in the skin of a perfectly healthy person a severe burning pain is experienced, and a small blister rises in the centre of the spot; no harm results from the test beyond the formation of an eschar, all traces of which vanish in the course of a fortnight.

XX.

A Contribution to the Study of Uric Acid Deposits.

By J. T. Greenleaf, M. D.

In the short practice of some thirteen years, it has been the lot of the writer to meet some cases where copious deposits of red or yellow sand in the urine has required attention.

On turning to the distinctive literature of our school, the accounts of like cases have been very meagre, and the helps to prescription or prognosis have been very weak.

These facts are the apology for this paper, as it required much investigation and many experiments to reach the points which are here noted. It is hoped that it may be of assistance to some one, and answer for a basis for further investigation.

In a given case where copious red or yellow deposits are found, the first question to answer is whether the deposits are uric acid, blood or purpurine.

White deposits, which disappear on heating when the urine is acid, are urates. Any tint from fawn color to deep red, which disappears on heating, is caused by urates.

Blood is mixed with the urine when in the act of voiding it, or follows as clear blood at the close of the act; so if the deposits appear on the cooling of the urine, which has shown only a clear stream when being voided, they are likely to be urates or uric acid. To be accurate, all the urine voided in twenty-four hours should be collected and weighed, one ounce should be taken from it while the whole mass is being stirred. This single ounce should be put into a glass containing thirty drops of Hydrochloric acid and set away to settle.

Half a test-tube full of the balance may be warmed gently, if the sediment dissolves, it is urates; if there settles a small, dirty, brown residue, while part dissolves to reform again on cooling, it is both urates and uric acid.

If the dissolved part be drawn off while warm, and the dirty brown residue treated with Liquor Potassæ, and is found to dissolve in the Potassæ, it is uric acid. If it does not dissolve it is phosphatic.

If now we have urates, or uric acid, or both, we next proceed to draw off the supernatant fluid in the one ounce set aside, after stirring down the crystals lodging on the sides of the vessel. The residue may be washed, dried and weighed. Multiply the weight from the single ounce by the amount voided in twenty-four hours, and if the product exceeds eight and one-tenth grains, there is a proportionate excess of urates, and uric acid.

This test for quantity is necessary, because there may seem to be an excess when only the urine is scanty.

The merest tyro in microscopy can easily recognize the rhomboidal laminæ of uric acid, which is sufficient for diagnostic purposes without seeking to attain the finer shades of diagnosis, by the study of the eight to ten other forms which can be found.

The urates show the characteristics of an amorphous powder, but on the addition of a drop of acetic acid to the drop on the slide, the crystals of uric acid resulting will demonstrate the crystals to be urates.

Having found that there is an excess of uric acid or urates, the next step is to find the cause of their appearance.

They undoubtedly result from the metamorphosis of tissue, but beyond this no satisfactory hypothesis has been offered, though even the celebrated Liebig has made it a study. We must be contented for the present to note that such appearances are found in one of five states of the body.

1. *The waste of tissue is more rapid than the supply of nitrogenized nourishment.* Fevers, acute inflammations, rheumatism, etc.

2. *The supply of nitrogen in the food is greater than is required for the supply and repair of tissue.* Excessive indulgence in animal food, or little or no exercise when the normal quantity is taken.

3. *The supply of nitrogenized food not being in excess, but the digestive functions are unable to assimilate it.* Dyspepsia in all forms.

4. *The cutaneous outlet for nitrogenized excreta being obstructed, the kidneys are called upon to compensate for the deficient function.* All stages of disease in general which are accompanied with arrest of perspiration.

5. *Congestion of Kidneys*, produced by traumatic causes.

This sweeping classification would change all practice of physic into treatment of uric acid deposists, were it not for the fact that only in the second and third classes is the deposit sufficiently great or permanent to merit attention.

This classification will hold true for urates, or urates and uric acid but not for uric acid alone. This may depend on some impairment of the renal function, or if some condition obtains where a free acid is held in solution in the urine which will dissolve urates, and throw down uric acid in a free state. This might occur in dyspepsia with pyrosis where free Hydrochloric Acid from the gastric juice would find its way into the urine and act as a solvent to the urates.

Our attention will be attracted to the copious sediment of the urates in many forms of dyspepsia, and may be studied under that head, but as our subject is uric acid alone, we will direct the attention to some means of relief for that state only.

When we become satisfied of the presence of an excess of free uric acid, an examination for stone in the bladder should always be had, as nearly nine tenths of all calculi have either a uric acid nucleus, or are composed of urates. When the microscope reveals a large quantity of square laminæ which are a form of uric acid occurring in long standing cases, we should look for albumen and casts from the kidneys, as many such terminate in Bright's disease.

The history of almost all cases of free uric acid deposits will be found to have begun with division No. 2, and will end in No. 3, as a natural consequence.

Prognosis should always be guarded but hopeful, as nearly all cases have a very despondent hopeless state of mind, which must be met as honestly as possible, without revealing fears as to the result.

The treatment may be either, hygienic chemical or with remedies, but generally includes all three.

The amount of animal food should be reduced to a minimum, and as many indigestible articles of diet should be avoided as the case can be made to agree to.

All the exercise possible should be enjoined with the use of a warm bath daily.

Plenty of fresh air and out-door life, without so combining the exercise and out-door life as to overtax the system.

Many so called specifics have been used in these maladies, but all have been based on some solution of bases combined with a weak acid, which the uric acid can easily displace. In imitation of these some solution of Sodic Carbonate will be very valuable, and for such a purpose Vichy water is both pleasant and useful.

The deposit of gravel may be much lessened and the general health improved somewhat by these expedients. The great desideratum is to reach the cause. Our remedies are not so well proved as yet that we can safely prescribe for a pathological condition, as such, particularly one that seems to affect so many organs at once, yet by individualizing each case, and using the best remedy we can find for a prolonged time, we can relieve many cases.

The most successful remedies in my hands have been the following, though the requirements of each case will enlarge the list, as we can sometimes relieve with a remedy whose pathogenesis is very similar to the given case, without the production of uric acid being noted in the list of proved symptoms.

Argentum Nit.—Uric acid sand in the urine with acute pains from kidneys through to the bladder.

Berberis vulg.—Bright red, mealy sediment in the urine, with sharp pain in the right kidney, with pain along the ureter.

Coccus Cacti.—Lateritious sediment of the color of brick dust, which adheres to the vessel (probably urates and uric acid) with nephritic colic and bruised pain in sacro-lumbar region and loins.

Lycopodium.—Red sand in the urine, with sensation of fulness after eating only a little, great deal of flatulence.

Ocimum Canum.—Brick dust sediment with renal colic, right side, violent vomiting, twisting about and groaning.

Sarsaparilla.—Uric acid sand, with symptoms of vesical calculi.

Sepia.—Sediment of red sand with nausea vomiting, and severe frontal headache, much gas in stomach.

Terebinthina.—Uric acid deposits which change in color from day to day, now yellow, now red, etc., with dysuria and burning in urethra.

XXI.

Actea Racemosa, in its Relation to Alcoholism and the Opium Habit.

BY C. C. CURTIS, M. D.

In reading over a number of the provings of this remedy, I find the following symptoms: Desire for solitude; dejection; anxiety; fear of death; thinks she is going to die; nervous prostration, resembling delirium tremens; mental depression with suicidal tendency; head feels strange and wild; irritable; vertigo; head feels large and heavy; dulness and heaviness of the head; imagins strange objects about the bed; brain feels too large for the cranium; waving sensation in the brain; cerebral irritation and congestion; heavy, dull, aching sensation in the forehead, in connection with a feeling of dizziness; face pale, eyes large and sunken, mouth and tongue feel dry; dryness of the pharynx; wants to drink cold water; wild fearful expression; tongue pointed and trembling; mouth and tongue warm and dry; palpitation; face livid; pulse quick, irregular, feeble in the morning, with trembling and weakness; quick full pulse; spinal irritation; coma; sleeplessness with excited brain; unrefreshing sleep; flushed condition of the face, followed by uneasiness in the stomach, and violent efforts to vomit; loss of appetite; repugnance to food; faintness in the stomach; nausea and vomiting; nausea when raising the head from the pillow. (Bry) frequent, thin, dark, offensive stools; alternate diarrhœa and constipation; (Nux.) hands tremble, especially when vomiting; cold sweat on the hands; urine bloody and scanty; profuse flow of pale watery urine.

This exhibit from the materia medica, it will be observed, sets forth a remarkable similimum of the leading symptoms present after the abuse of Opium and Alcohol. In the clinical cases which follow, there is simple confirmation, not only of the value of the remedy in such cases, but of the therapeutic law of our school.

Mrs. B., nearly fifty years old, came to me about one year ago and complained of sleeplessness, general debility and constipation. Her eyes were large and her face presented a cold, bluish, pale appearance. Her pulse was small, rapid and irregular. After examining the patient and questioning her at some length; she admitted that she had eaten Opium about nine years. It was with some difficulty that I persuaded her to discontinue its use. I decided to give her Macrotin^{2x} which she took in

half grain doses, four times a day, and continued three weeks. She could then sleep well, had a good appetite and the constipation was relieved. She had no craving for the Opium, and her health was much improved. More than six months after this she told me she was not using the Opium, and that she should not return to it again.

Mr. C., fifty-five years old, called at my office one evening early last spring. He exhibited a nervous expression; his hands trembled, and he appeared in an anxious mood. His face had a somewhat livid appearance; pulse rapid. At this time he was afflicted with diarrhœa, and every few weeks he had diarrhœa, alternating with constipation. His head felt dull and heavy and was quite warm; memory poor; very little desire for food; said he had not slept well for many nights. This man had eaten Opium six years. I gave him Macrotin ^{2x} in half grain powders, four times a day. He agreed to use no more Opium. One week from this date he called on me and expressed his surprise that he did not feel the need of the Opium. He was sleeping better and his appetite was improved. I continued the Macrotin and he reported again in two weeks: The bowels were moving naturally; pulse about seventy-four; his sleep was good and refreshing, and he said he was "*feeling like a new man.*"

August 2d., at ten o'clock, P. M., I was called to go four miles in the country to see a young married woman who had taken half an ounce of Laudanum, with the intention of committing suicide. The family had given her some coffee before I arrived. I found her comatose; pulse rapid and full; pupils contracted; severe pain all through the head when disturbed, and on raising the head complained of vertigo and nausea. I gave her Macrotin ^{1x} once an hour for six hours, and then once in two hours, until the evening of August 3d. The coma continued nearly eight hours. She slept none the next day; the pain in the head, the vertigo, and nausea continued till evening, but with less severity. She slept well the following night, and came to see me next morning feeling perfectly well.

Mr. D. thirty-eight years old; temperament, bilious sanguine. For several years has had periodical attacks of dypsomania. On the occasion referred to, he had been drinking for ten days which resulted in mania a potu. His old school physician had been called and had administered during the last three hours previous to my visit not less than ninety grains of Hydrate of Chloral, ninety grains of Bromide of Potassium, and seven grains of Sulphate of Morphine, in the vain endeavor to procure sleep. Instead of procuring this effect, the patient grew more wild and ungovernable than ever and finally escaped from his attendants, two strong men, rushed from the house, was pursued through a number of streets and finally took refuge in a neighbor's house. Here he declared that he would no longer see his former physician, but consented to see me. On entering his room, he presented a wild expression of countenance; staring eyes; marked tremor of the extremities; hasty and somewhat incoherent speech, and a desire to once more escape from his attendants. The tongue was moist, pointed and tremulous; great thirst; loss of appetite; constipation; scanty, high colored urine. Gave him five grains of Macrotin and left several three grain powders with instructions to repeat once in half an hour until he became quiet; then to lengthen the interval propor-

tionate to the relief, but not to waken him should he go to sleep. In one hour he was sleeping quietly, which condition lasted some time. When he awakened, he felt considerably refreshed and much calmer. The remedy was given about once in four hours for the next three days, at which time he was discharged, and on the fifth day he attended to his usual business.

It will be noticed that I have used quite massive dôses of the remedy, but as I had to overcome the poisonous effect of Opium and Alcohol, I considered that the attenuations would be of no value.

XXII.

Intermittent Fever--Cases from Practice.

BY F. P. SHELDON, M. D.

Case first, Sept. 3d, 1878, Miss C., age 28—Has had chills and fever for the last three years, treated allopathically during that time, with massive doses of Quinine. This would stop the paroxysm for three or four weeks, when it would return. Chill would come on usually about three or four o'clock P. M. Hard shaking chill, with cough during the chill, complained particularly of itching, and burning on different parts of the body; severe backache. The cough, urticaria, and time of chill were very good symptoms of Apis. mel. which was given. Apis ^{3x} in water, one teaspoonful three times a day, for eight days. Had one chill after taking medicine; no more for three weeks; when a slight chill; ℞ Apis. mel. ^{6x} in water, one teaspoonful every night for eight days. Has had no return of malaria since.

Case second, R. B., Dec. 24th 1879—Has had malaria at different times for the last four years, but not severe; used Quinine to break it; has not had any chills since Sept. last; present trouble, nightly colic, with diarrhœa and nausea, but no vomiting; had tried a number of things to stop it, such as Mustard Plasters, Herbs and Teas, prescribed by different persons, friends of patient, but no relief; would wake up every night about twelve o'clock with severe pain in bowels just above umbilicus, followed by fever, which would last about an hour, and would leave on his breaking out into free perspiration; next day would have two or three loose passages of the bowels; bitter taste in mouth, tongue dark red; not much thirst; gave Nux. vom., Colocynth and Dioscorea, but could see no improvement. Looked well over materia medica, and found Chamamilla met the periodicity of the nightly colic, also the other symptoms. Gave Chamamilla six drops in ten tablespoonsfuls of water, one teaspoonful every four hours for three days. Had no return of colic for two weeks; then slight pain lasting only fifteen or twenty minutes; gave same prescription, one teaspoonful morning and night, for eight days; no return of pain since.

Case third, Will. C., July, 1879—Has had three chills, tertian type; never had them before; chill usually came on about eleven o'clock A. M., with great thirst both before and during chill; during heat, complained of

most violent pain in head; also a large number of *fever sores* about the mouth; during the intermission everything tastes bad; *bitter taste* in mouth, *white coated* tongue; after eating, sour bitter eructations pain in small of back, etc. The above symptoms are good indications for Natrum mur., especially the fever sores, time of chill, etc. Natrum mur. first dec. trit. was given every four hours commencing with the first powder just as fever is passing off, and continued one week; had one chill after medicine but none since.

Case four, J. M., Nov., 1880—Came from allopathic hands; has had chills with an intermission of from one to three weeks for the last six months; taken very large quantities of Quinine; is quite deaf in left ear, and says there is a continual buzzing and roaring noise in right ear; undoubtedly caused by the large quantity of Quinine he had taken; had decidedly what is called the "Malarial Cachexia;" the face pale and sunken; tongue yellow, coated; before an attack complains of headache, yawning, stretching, and a feeling of general discomfort; during chill, no thirst, restlessness and great anxiety; the heat generally very little; has burning in stomach, with great thirst, but drinks little at a time; during sweat thirst was greatest, and wanted large quantities of water, seemed to be greatly prostrated. ℞ Arsenicum [13] in water, one teaspoonful every two hours; also Picrate of Ammonia in water, one grain to the ounce, teaspoonful three times a day; continued this treatment one week with exception of giving Arsenicum every three hours after second day; no return of chill; patient says he feels better than he has felt in six months; dropped all medicine for one week; patient reported at that time a slight chill; gave Picrate of Ammonia, same proportion as above; dose teaspoonful every night, for one week; patient has had no more chills since.

I have used Picrate of Ammonia in a number of cases of long standing, who had previously used Quinine in large doses, and have cured my patients, using other remedies as they seem indicated.

XXIII.

Range of Dose.

BY MILTON A. WILSON, M. D.

It is the object of this paper to prove by clinical reports that the range of dose is limited only by results, and that it is impossible to formulate a universal law of dose. As the greatest brevity consistent with the statement of simple facts and plain deductions is desirable, much will be left to the inference of the reader on minor points.

But it seems necessary to consider briefly the mode of the action of drugs. Each drug is an *individual*, and although (in the proving), in different dose, and at different stages of its progressive action it produces quasi-opposite effects, they are complemental and, running through each series of effects, there are certain indubitable traces of the individual called characteristics.

The joy of each person finds its complemental opposite, not in the sorrow of another, but its own. Each have their own opposites of rest and unrest, love and hate, etc., and the sum of the faculties determines the individuality and tendency of the person. In a treatise on organic remedies, (eclectic), Grover Coe, M. D., mentions Senecio gracilis as an emmenagogue of no uncertain power; and also states that he has used it freqently and as successfully in cases of menorrhagia. His explanation is, that it restores the equilibrium of the menstrual function. He classes Euphorbia cor., with the hydrogogue cathartics frequently employed for the removal of dropsical effusions, and afterwards writes: "We have found the Euporbia of much utility in the treatment of cholera infantum, diarrhœa and dysentery. * * * We have administered it in cases of cholera infantum when the alvine discharges were watery, copious and offensive, and had, as the result of its operation well assimilated stools without fetor." He states definitely that the dose and manner of exhibiting the drugs was the same for menorrhagia as for amenorrhœa, for diarrhœa as for constipation.

Although Dr. Coe ignores the principle, the effects of the remedies were specific and homœopathic, as they resulted in restored equilibrium, which means health. Thus the true *symptomatic*, contraria and similia, are but opposite branches of that symmetrical tree whose root is the universal law of rapport between drugs and the diseased organism. "Similia, Similibus, Curantur." In the action of some drugs, complemental effects are not striking, and they must be prescribed on an apparently one-sided basis, but in others this is not true, and I contend that we have a right, according to our law, to use varying doses from physiological ones of the crude drugs, to the highest potencies, as our case may seem to require, based an the *characteristic* indications.

Characteristics should correspond to pathological states. If they do not, the proving or the observer are at fault, and the result will be a failure. The use of Ipecac, to relieve nausea, or Rheum to cure diarrhœa by the allopathists is not homœopathic and will not prove curative unless the characteristic indications for them are present. Neither would the administration of Podophyllum in physiological doses for its typical constipation by them, be in accordance with their principles, but on the contrary strictly homœopathic. Homœopathy covers every curative application of drugs to disease. But it does not recognize a kindred spirit in the coarse drug provings of the modern scientific (?) allopathists which sink the individual in the general, and make the diseased system the battle ground for contending factions, except in so far as they may be the harbingers of better things.

The learned Frerich of Berlin says: "An excess of scientific acquirements has, notwithstanding all the warnings of history, misled some physicians into the adoption of the so-called rational system of therapeutics as the only correct system of treatment." There is a partial application of the homœopathic law which does not include the use of crude drugs, but is confined to high potencies.

It is based on the increased susceptibility of the diseased organism to drug action, and the consequent aggravations which sometimes occur from larger doses. The observations of the writer have been that more aggra-

vations are due to the *unimpeded* progress and development of the disease owing to an *improperly* chosen remedy, or to too small a dose of the proper one.

V. B., aet. fifty-five years; Nervo-bilious temperament, occupation, postmaster, applied to me August 30th, 1878, to be treated for diabetes mell. He had been under the O. S. treatment seven weeks, and during that time had decreased in weight thirty-five pounds. Being mentally depressed and showing bodily signs of an advanced cachexia, he presented a forlorn appearrnce. Face pallid, pitting on long pressure, mouth hot and dry, gums sore, thirst excessive and appetite moderate; liver laboring under a chronic quino-mercuro-malarial poisoning, bowels constipated, stools clayey-white and dry. Urine enormous in quantity and voided night and day, Sp. Gr. 1042. That which drizzled down the sides of the bottle dried in gummy streaks, no sediment except a slight cloud of light colored mucus.

After searching the materia medica and latest therapeutics in vain for an exact similimum to the totality of the symptoms, I concluded to exhibit Uranium nit. on its pathognomonic signs, saccharine urine. Not having Uranium, and the patient being impatient, I gave him Lycopus virgin, teaspoonful doses of the fluid extract, as an expedient. It produced a perceptible diminution in the quantity of the urine, while the gravity proportionately increased, showing that it had no radical effect nor true curative relation to the case. Then Uranium nit. was prescribed in the 2d trit. one grain in water twice a day. The patient ridiculed the very idea that such a little thing could help him, but at the end of the week reported a considerable decrease in the amount of urine, and a slightly lower gravity. He continued to improve slowly for a while, and then came to a standstill. On account of this, and because *he thought* the medicine made his gums sorer, I gave him Uran. nit. ^{200}, when he grew worse in every respect during the period of its exhibition, one week. The 200th was then discontinued, and the one-thirtieth part of a grain of the drug substituted. From this time he improved rapidly, and soon become well and strong. He had several aggravations, but only for a day or two at a time, except while taking the 200th, and they were plainly referable to injudicious exposure, etc. The drug in the largest doses produced no appreciable aggravation of any of his symptoms, and I should have felt it my duty if necessary, to stop only at the poison limit. Another frequent cause of aggravation is idiosyncrasy. Miss A. Y., act. twenty-eight years, caught a severe cold Dec. 7th, 1878, which resulted in a dry paroxysmal cough, great soreness and constriction about the chest and suppression of the menses. She consulted an O. S. doctor at the time, who expressed the opinion that her right lung was "stuffed with tubercels" and that although he was an old man he would probably out live her. She came to me in March with the symptoms mentioned above. Physical examination found slight dullness at the base of the right lung, and a few noncharacteristic rales. Pulse weak, but not accelerated. When told she had not tuberculosis and that she could be cured, she would not believe me, until her case was gone over point by point and thoroughly explained. The menstrual suppression and the gloomy prognosis of her former medical adviser had frightened her. Bryonia 3^{c} removed the cough and sore-

ness about the chest, but did not restore the absent menses. The case now presented the characteristics of Pulsatilla, *i. e.*, oppression of the chest with desire for fresh air, low spirits, tearfulness, etc. The 4th^c was prescribed. A few days after I received a note from her stating that she felt worse in every way; that slight sounds were greatly and painfully intensified, and that she was troubled with pains in the groins, and bearing down. She recognized the symptoms as the effects of Puls., for she had taken it some years ago. The 30th^c was then tried, but she could not take it. However she menstruated soon after, and is improving every day.

I have often given Pulsatilla in larger doses when it seemed just as well indicated without aggravation. Experience in this case led me to go higher, but if the case had not been affected by the 4th, I should have given material doses.

N. B. This patient did not appear delicate, susceptible or highly organized.

Case number three, Mrs. Mc Int., aet. thirty-five yrs. Enciente, suffered greatly from intermittent fever, more especially when she should have been unwell. Two O. S. physicians had treated her for several months with moderate doses of Quinia and other febrifuges, with only partial and temporary benefit. I gave her Ipecac and Puls., to antidote the Quinia, which somewhat improved her general health, but did not remove the ague. China now seemed well indicated, and she took the 30^c faithfully but without effect. Sulphate of Cinchonidia was prescribed in 10 gr. doses the night before an expected chill. A few doses removed the ague entirely, and greatly improved her general health. At present she is the mother of a healthy child ten days old, and is doing well. The drug produced no perceptible physiological effects. Would she have done as well if I had sought another, similar, based on some fine indication, and applied it in a very high potency? The result suited me very well.

The next case, number four, illustrates the curative power of high potencies. Mrs. S. aet. about fifty-five yrs., was attacked with a violent crampy pain, about the left malar bone, in paroxysms. She had had many previous attacks which had lasted about three days under O. S. treatment, remedies were left, and I saw her again in three hours and found her worse. She then informed me that each attack of pain was attended with a profuse flow of pale urine and crampy pain in the bowels, with diarrhœa. Colocynth 200th in water, a teaspoonful every hour, was prescribed. After taking the second dose, she was completely relieved in every respect, and has remained well ever since, a period of over two years.

Case number five, may leave doubts in the mind of the hearer as to the homœopathicity of the curative agent. Mrs. S. aet. thirty-five years, nervous-sanguine temperament had suffered for years from vertex headaches, with bright flashes before the eyes, which Cactus 2^x promptly relieved. While crossing the room soon after receiving news of the sudden death of her sister in a distant State, she fell in a fit. When I saw her several hours afterward, she had intense throbbing head-ache and photophobia. Remedies, notably Bell, gave only partial relief, but order came out of chaos, in the shape of a fixed pain in the right temple and marked vertical hemiopia. Diagnosis aneurism of a cerebral artery pressing on the

right optic nerve. The case was treated a long time with remedies carefully selected, but did not improve. Lycopodium stirred up her general sytem, but did the eyes no good. No other remedy had the least effect. The patient was growing discouraged, and rather than have her lapse into O. S. hands, I prescribed Bromide of Potassium in eight grain doses twice a day, with almost immediate benefit. In six weeks she was permanently cured. Was this cure the result of a remedy applied according to the law, Similia Similibus Curantur? If so, the law covers a wider range than many accord to it. If not, there must be another law of cure. No one will deny that the action was specific, and we claim that it was homœopathic, the law being universal how could it be otherwise. It must have been administered according to the true *symptomatic contraria* which is a part of, and subordinate to the general and complete action of the drug. Enough cases have been cited to show that remedies in all doses from the crude drug to high potencies act curatively. Large doses have been given without exciting physiological action, and again very small ones have aggravated severely.

The writer believes that as a rule the dose should be small enough not to excite physiological action, but in some cases has seen decided benefit arise from so doing. Expediency and common sense declare against high potencies except so far as subdivision favors absorption, and in favor of the law. Theory, always Utopian and beautiful, sustains the claims of the "minimum dose," so called.

But experience, the basis of all sure knowledge, declares both to be curative and indispensable. We hope some one will be able in the future, to discover a law as unerring a guide in the selection of a dose, as our therapeutic law is in the selection of a remedy, but at present the weight of evidence is decidedly against the fulfilment of the hope.

Most respectfully inscribed to the Bureau of Clinical Medicine of the New York State Homœopathic Medical Society.

XXIV.

Glossitis.

By M. A. Wilson, M. D.

A case, rheumatic in character and metastatic in origin.

Having never read nor heard of a similar origin and character of the disease in question, the writer would most respectfully ask the attention of the Society to a short description of the case and its treatment.

Glossitis usually arises from injuries, stings of insects, etc., directly applied to the tongue or as a direct result of exposure to cold. The following case has a very different history.

On July 29th, 1876, I was summoned to attend Mr. M., aged sixty-five years; nativity, German; occupation, farmer. The messenger said the patient, his father, had been under regular treatment for several days, was growing worse and was no longer able to take the large bitter powders

(Quinine) left for him, and that they wished the change, not because they thought it possible for him to recover, but because the medicine would be easier to take.

I found the old man erect, his brow wrinkled, temporal veins distended, eyes protruded, mouth open with quantities of saliva dribbling down his beard; lips swollen and blue, his face bloated and a decided cyanotic hue overspreading the whole. In a word, the livid face, protruded eyes and anxious countenance betrayed a serious obstruction of the circulation of the head and neck! His tongue was found to be swollen so that it completely covered the lower teeth and was protruded so the jaws were forced widly apart, but its base seemed still more swollen in proportion. The whole organ felt indurated and had a bluish-grey appearance. The salivary glands were only slightly enlarged. He could not speak intelligibly; had taken no solid food for several days and had not lain down, except for a few moments at a time, since he was attacked. His pulse at this time was under sixty, full and soft, and his lower extremities œdematous to the knees.

The subjective symptoms, as near as I could learn, were a sense of fullness and constriction about the head, as if it were banded, so greatly intensified by lying that he had to sleep sitting erect, and invariably felt worse on awakening. Vertigo was also a prominent symptom, and there was a full and distressed feeling about the throat.

A few days before his tongue became affected, after wading in a creek, he was attacked with a tearing pain in the right hip, attended by stiffness and swelling of the muscles. Fomentations of herbs, smart-weed, etc., were applied as hot as could be borne and Trask's Magnetic Ointment was rubbed in freely. Under this treatment, the pain in his hip was rapidly subdued and he felt almost well, but the next day his tongue began to swell and became painful. Then he called a doctor with the above result.

My diagnosis to the family, was rheumatic inflammation of the tongue. The remedies that the case suggested to me were, first, Mercurius; second, Sodium; and third, Lachesis; either of the two first covers the case symptomatically, for both have sense of constriction about the head, ptyalism, cyanosis, anxiety, etc. Lachesis has sense of fullness about the neck and the aggravation after sleep. A dose of Lachesis ^{200} was given with the hope of somewhat allaying the nervous sensations. But Mercurius sol. was the remedy chosen for continual administration on account of its relation to rheumatism as well as its symptomatic one. Several two grain powders of the third centesimal were left with directions to give one every hour and report to me at 8 P. M. At that time his son came and said: "Father is a very little better." I gave him twenty more Merc. sol^{3} powders, to be given as the others had been, and said I would visit him in the morning.

At 10 A. M., of the 30th, I found him sitting in his chair with his mouth closed, but as soon as he saw me he opened it widely and thrust out his tongue in various directions to let me see how it worked. The anxious stare had been replaced by an expression of joy and thankfulness.

The cause being removed, he slept in bed that night and all the other symptoms "folded their tents like the Arabs and silently stole away," one by one.

August 11th, he sent for me again; this time there was slight swelling of the root of his tongue, considerable hoarseness, and a return of the vertigo and sense of constriction about the head. Iodine now stood pre-eminent as the exact similimum. He received the second decimal dilution, 10 drops in a tumbler one-half full of water, and was directed to take a teaspoonful every two hours. A few doses completely relieved him, and he continues well and hearty, for an old man, to this day.

Retrospect.—At the time the case was placed under homœopathic treatment, and for some days before, it presented signs of passive cerebral congestion and asthenia.

That insane expectancy which, leaving the disease to take care of itself, prescribed large doses of Quinine to overcome the asthenia whose cause it undoubtedly aggravated, is a legitimate outcome of that pseudo science which arbitrarily classifies certain drugs as general tonics, and others as antiphlogistics, etc., whereas every remedy in the materia medica is capable of efficient tonic effects when properly exhibited. The very thing this swollen, overburned tongue needed was a specific tonic. The Mercury, classed as an antiphlogistic and destroyer of the vitality of the blood fulfilled the indications and a cure resulted. It seems to have had a pathological, as well as symptomatic similarity to the whole case.

In the absence of better means, free scarification of the tongue, even in the debilitated state of the general system would have been far more effectual than Quinia and expectancy. Expectancy, except for experimental purposes, indicates a death of therapeutical knowledge or an utter lack of confidence in the means at command. Let us be prepared to "Smite down the dragons fell and dire whose breath is fever fire," or resign the heaven-born mission of physicians. At least make an honest effort. It may be urged by some that resolution was about to take place in said tongue, on account of the duration of the disease, the asthenia and the slow pulse, and that the above result was only a coincidence. Such was the first impression of the writer, but further thought convinced him that the impression was wrong; for the increasing swelling of the tongue, notwithstanding the general debility, indicated to him that the cerebral hyperæmia and the debility helped to increase the very condition which had caused them. The slow pulse was caused by cerebral compression and Carbonic Acid poisoning.

XXV.

Clinical Notes; Acontie in Infantile Diarrhœa.

By JOHN C. MORGAN, M. D.

During the past summer, I have been led to use this old fashioned drug very much in the severe form of "summer complaint." Indeed, I believe it is often improperly passed by in favor of Arsenicum Chamomilla, Ipecac, Podophyllum, Belladonna, etc. In the following case, such remedies proved utterly useless, and even worse.

Case—Boy of fifteen months; dentition very tardy; temperament very fine; disposition bright and affectionate. With every dentitional effort, great aggravation. Wants to bite, tear, etc., things and persons—pulls the nurse's hair—dashes his head against the head-board of the bed—frantic spells. Stools, sometimes undigested, yellow—sometimes green, and sometimes like fawn-colored batter, with sediment like Indian meal. On several occasions, very prostrated; eyes sunken, with dark under lid; very restless, lying on nurse's arm, then changing to her shoulder, then to arm, then to the other side; fever not so notable as prostration; intense thirst; *wanting to be carried all the time.* Wiry, almost thready pulse, yet firm, tense and distinct under pressure of the finger.

Aconite[3] every two to four hours, dispelled all these symptoms; but from that time it has been necessary to continue Aconite, [3x], [15c] and 200th, *pro re nata;* that is, as his teeth are still slowly appearing, the eruption of each is preceded by the frantic mood, and the drug is given in the 200th attenuation, four doses in water, renewed at each paroxysm. By this means he is kept, for the most part, in a very good condition. This course has been continued for about six months.

PLEURODYNIA.—This slight disease is often a great burden, particularly to sensative women. I have had much satisfaction in treating it, even when it had seemed almost inveterate. I first carefully diagnose the tissue location. Often, by alternate pressure *on* the ribs and *between* the ribs, I locate soreness in the *bones.* The sure remedy in such cases is *Mercurius.*

If located in the intercostal spaces, the remedy is *Arnica,* or if constitutionally preferable, *Pulsatilla.*

MEASLES AND BELLADONNA.—A girl of fourteen years had measles. She is naturally sanguine, bright, quick of motion, a type of Belladonna personality. With this attack came exageration of these traits, with thirst and hasty drinking; red and over-bright eyes; tonsillitis of bright red color, worst on right side; bright red eruption; frontal headache. *Bell.*[200] every three hours, rapidly relieved, and convalescence set in.

SCARLATINA AND LACHESIS.—Another girl of the same age, position, but more fleshy—of German parentage—had scarlet fever, received cathartic medicine. Eruption appeared, but of bluish-red hue. Tonsillitis, bluish-red, worst on left side, with whitish mass protruding from a crypt of the tonsil. Weakened by the cathartic. *Lachesis*[200] every three to four hours, quickly relieved the throat—the eruption gradually faded, and the patient recovered without sequelæ. All the rest of the family got *Bell.*[200] for prophylaxis—no other case occurred.

XXVI.

A Very Chronic Case.

BY JOSEPH H. MCDOUGALL, M. D.

About January 11th, 1878, I was consulted by Miss W——, an inmate of the "Chapin House," New York, for the treatment of hæmorrhoids, which she had been suffering from for thirty-five years. She was sixty-four years of age, small, short, of dark complexion, intelligent and of an amiable disposition, *not disposed to parade her grief.* She would have about three stools each day, always accompanied by *a profuse flow of blood from the rectum, and a prolapse of the hæmorrhoidal tumors which would have to be replaced.* I prescribed Ignatia^{30th}, a powder to be dissolved each day in four tablespoonfuls of water; one tablespoonful to be taken before each meal, and on retiring at night. In one week she was very much improved. She said: "Doctor that medicine you gave me made me worse. I thought it was too strong so I took half the quantity and I began to get better." The hemorrhage soon stopped entirely. Her *general health is very good,* and she has had only one serious relapse, which occurred in October, 1878. I thought her a good subject for a high potency experiment, so I gave her Ignatia 5m., the hemorrhage ceased in November, and has not yet returned, except a *very slight* oozing after over-exertion. The tumors still protrude, but not so much as before. I suppose they are hypertrophied.

XXVII.

Clinical Cases.

BY O. E. PRATT, M. D.

OPHTHALMIA NEONATORUM.

First—Ella A., aged six week's, purulent ophthalmia since two days old; has not opened her eyes in five weeks; has been treated allopathically with mild collyria. Examination revealed haziness of cornea, lids puffed out with excessive accumulation of acrid pus which constantly oozed out upon cheeks, causing considerable irritation; photophobia very marked. The cause was found in an acrid leucorrhœa of the mother; Prognosis unfavorable. Commenced treatment by first cleansing palpebral conjunctivæ with tepid water, and then painting on everted lids, a solution of Nitrate of Silver, ten grains to an ounce of soft water, once daily, taking care to use immediately after a solution of common salt brushed over the lids. Prescribed Merc. Sol. 3x trituration, a powder every two hours and enjoined perfect cleanliness. Marked improvement was manifest in twenty-four hours, and continued uninterrupted to perfect recovery in three

weeks. The babe had also a purulent discharge from vagina which yielded promptly to the single remedy. This case impressed me very strongly with the necessity of making careful and thorough examination before prescribing for diseased eyes. Vision would have been destroyed in one eye in a short time under the former treatment. The mother informed me that no examination had been made by the old physician in charge, and yet he remarked that it was the worst case he had seen in a practice of fifty years.

Second—Harry M., aged twenty-five years; occupation a farmer. While bathing in the river, a few weeks previously, was suddenly seized with a choking, suffocating sensation, and inability to swallow; recurs several times daily. The attacks last about a minute and increase in frequency and severity and are attended with considerable nervous irritability. Diagnosed spasmodic stricture of œsophagus and prescribed Belladonna 30x, alternated with Ignatia 30x. Cure immediate. No return eight months afterwards.

Third—Mr. E. L., manufacturer, has been troubled for several months with catarrh of the bladder; passes large quantities of ropy urine; has to rise frequently at night to urinate; has been treated allopathically by several resident physicians with no relief. Prescribed Arsenicum 3x, alternated with Nux vom. 3x, cured him in one week; no return two months afterwards.

Fourth—Erysipelas, Mr. W., was attacked with a severe chill lasting about an hour, followed with fever, headache and sleeplessness. I was called on the following morning and found him suffering from terrible pain in back and limbs, great restlessness; said he, "felt sick all over;" right cheek red and œdematous, tense and shining. The swelling spread rapidly to both cheeks and forehead, eyes completely closed. The following is the record of pulse and temperature:

1st day, pulse 108, temperature 104°, Fahren.
2d day 8 A. M., pulse 105 temperature 103°.
2d day 2 P. M., pulse 108, temperature 105°.
2d day 9 P. M., pulse 108, temperature 103°.
3d day 9 A. M., pulse 92, temperature 102°.
3d day 2 P. M., pulse 94, temperature 102°.
3d day 9 P. M., pulse 94 temperature 101¾°.
4th day 9 A. M., pulse 84, temperature 99¾°.
4th day 9 P. M., pulse 80, temperature 100°.
5th day 9 A. M., pulse 78, tnmperature 93¾°.
5th day, 9 P. M., pulse 75, temperature 98½°.
6th day 9 A. M., pulse 72, temperature 98°.

Remedies used: Veratrum vir. 1x, Apis. 3x, Belladonna 3x. He was occasionally attacked with a violent throbbing, bursting headache, which promptly yielded to Glonoinum 30.

XXVIII.

Alcohol in Diphtheria.

BY IRA BARROWS, M. D.

"Of making books there is no end." This may be said of essays, reviews, reports and especially of reports of cases by physicians; reports of wonderful pathological developments, of remarkable cures by seldom or never before heard of remedies. It seems to me that some physicians expect to build a reputation grounded upon reports of cases, to them appearing either remarkable for pathological novelty, or for the rapidity and certainty with which certain diseases yield to their favorite remedies, although, in name, notoriously malignant. One disease, diphtheria, is sufficient for illustration. One reports cures by brushing the deposit in the throat with Muriate of Iron; another with caustics; a third has only to mount his horse and ride over the country with a quill and can of Sulphur and blow some of the powder into the throat of his patients, and thus make a clean sweep and rid the world of that terrible scourge. White spots upon the pharynx and tonsils disappear as rapidly as do pimples and nodules under the touch of cancer quacks, but fortunately for the patients, most white spots that appear in inflamed throats are not diphtheritic.

Diphtheria is a poison which aims at the destruction of life; whether of the fungus order as supposed by some, or imbibed from the atmosphere, or from whatever source; it is a poison which permeates the entire organism, and will surely destroy the life thereof, unless overcome by the vital forces or antidoted by foreign aid. Diphtheria is not cured by mere topical applications. To remove from the throat, putrid, offensive deposits, as far as practicable, by washes or gargles, is judicious and adjuvant. But the enemy to be conquered must be attacked in his lair.

But I am not going to write an essay or report cases, and thus come under the ban of my own criticism; yet I read many valuable essays and interesting reports of cases, and I can only wish that more of them were well grounded and reliable.

Medical journals and newspapers are teeming with reports of the ravages of diphtheria in many parts of our country, and the recent epidemic in Brooklyn, N. Y., which has proved so fatal to hundreds, has induced me to urge upon my medical brethren, the free use of Alcohol, in this disease. Do not expect to cure every case. Delay to call medical aid or adventitious conditions of the patient or the extreme malignancy of the case may prevent the cure. But do expect to cure twenty per cent. No matter how urgent the fever or great the prostration, if you have a case of diphtheria, give Alcohol at once, and nothing else except nourishment.

Alcohol at least 90 per cent. and water equal parts; with this, if the patients are old enough, gargle the throat every hour, and immediately after take one or two tablespoonfuls of Alcohol and water, equal parts, made *very sweet* with sugar. Three to four tablespoonfuls of sugar to half a pint. This, of course, is to mollify the Alcohol.

For children not old enough to gargle, Alcohol one part, water two parts, also made very sweet; give teaspoonful doses every half hour, for at least fifteen hours out of twenty-four. When the membrane begins to

slough, the throat will be more sensative to the Alcohol. Then dilute the Alcohol accordingly, and add Belladonna or Gelseminum or perhaps Mercury. Do not fail to give milk or beef tea sufficient to nourish.

If you have not used Alcohol thus freely, you will be surprised to notice its effect upon the fever and the prostration which so usually and severely attends its commencement as well as its progress.

XXIX.

A Case of Eczema.

BY A. WILSON DODS, M. D.

In reporting this case of eczema, I do so, not so much because I think it will bring out anything new in regard to the treatment of this disease, or the remedies used, but simply to put on record a case which shows what homœopathy can do under most adverse circumstances. The patient, a lady aged sixty resident of Hexham, England, had suffered from this disease for a little over a year, before I prescribed for her in April last. She had been under treatment by an old school physician during the whole year, the remedies used being a Carbolic acid wash, and a tonic of Ferrum and Arsenic, and by the way she had taken this same tonic for several years before the breaking out of this eruption, whenever she felt a little weak or out of sorts.

The disease commenced above and behind the right ear, then appeared at a corresponding point on the left side spreading from these points over the entire scalp, down the sides of the neck and on to the cheek. It appeared also on the arms, body, between the thighs, in the hollow of the knees and on the shins.

When I first prescribed for her, the eruption was worse in the lower extremities and face. She described it to me thus: "When it comes out first on a fresh place, it is bright red, with little raised nodules, and then seems to discharge at every pore a thin pale yellow fluid which hardens into a white crust. The eruption itches intensely and is made worse by scratching, washing with cold water, and at night on getting warm in bed."

In general health she was not well, the itching at night depriving her of sleep to a large extent. The appetite is good but the food must be of the plainest or it will disagree, causing diarrhœa. The bowels irregular, sometimes loose, sometimes constipated; when the latter the stools foul smelling. Urine about normal. Her strength was very much reduced, so much so that she could not even knit for more than half an hour at a time.

These are about all the symptoms I could learn, and from them I prescribed Graphites and Sulphur 200th potency to be taken alternately at intervals of three days for a fortnight; then to go a week without medicine, and then begin as before. In about six weeks I had her take only one dose a week, still alternating the remedies. She began to improve almost at once and has continued to do so. At the last report (which I received Sept 4th, dated Aug. 22d), she says: "My ears are still soft a little, but otherwise I am well."

XXX.

ERYSIPELAS.

Without Pain, Speedy Recovery.

By R. C. Moffat, M. D.

Dec 25 last, I was requested to visit Mrs. G., whose disease seemed to be simply weariness from overwork in the kitchen. There had been some weariness for several days, and now a hot skin,—temperature 104°, pulse 104—mouth dry, and tongue dirty white; no other ailment but a preference for the bed. ℞ Mercurius Sol.[6] and Belladonna.[3]

Second day—Rather more dryness of the mouth in which the throat took part; temperature 104½°, pulse 104; appetite poor, sleep indifferent, no pain. ℞ Chelidonium[3] Belladonna.[3]

Third day—Increased dryness of throat and mouth, sleep quite impaired; temperature 105°, pulse 104, no pain; besides these, there had come on in the early morning a well defined swelling below and in front of the left ear, extending over the temple and entire forehead, its well defined margin an inch above the eye brows. I would have pronounced it erysipelas at once, but there was neither pain nor shining. ℞ Apis.[3] Rhus.[1]

Fourth day—Followed a night of very imperfect sleep. The swelling had extended; it now involved both eyes, both cheeks, still the left ear; and was unmistakably erysipelas, being shiny and a very deep red, still there was no pain. The mouth and throat were less dry; the pulse reduced to 96, temperature 104.½ ℞ Apis. and Rhus. continued.

Fifth day—A wakeful night; the entire face a deep shining red, no vesicles,—pulse 90, temperature 104°—mouth and throat less dry, but no appetite; no pain, no restlessness; there were, however, weariness, and excessive loquacity, showing cerebral erethism in a marked degree. Disappointed in Apis., Belladonna was substituted, and the precription stood, ℞ Belladonna[3] and Rhus.[1]

Sixth day—Marked general mitigation; returning strength, moist mouth and throat; temperature 100½, pulse 88, and some acceptance of food. There remained, however, no sleep and excessive loquacity (on family and domestic affairs). This had lasted without interruption for thirty-six hours, and her attendants were wearied out. The improvement under Belladonna was hardly expected, the case differing so much from the characteristic symptoms of this drug, irritability, fever, heat of head, sore throat, etc., etc.; these were entirely wanting. However, accepting the improvement, the remedies were continued till bed time, when (forty-six hours) Coffea tinct. a few pellets in a half tumbler of water, and a teapoonful at 9½ o'clock; silence and sleep followed immediately,—it was the only dose,—and lasted nine and a half hours. When she awoke in the morning she was well, relieved of all of her discomforts, only indifference to food. Summing up the above, I would call attention to:

First—The invasion.

Second—The absence of pain.

Third—The change following Belladonna; and

Fourth—The rapid and complete recuperation under one dose of Coffea cruda tinct.

XXXI.

What Cures, and Who Knows?

BY T. L. BROWN, M. D.

This double question presents itself to every earnest physician whenever he attempts to treat a patient.

What is a cure? How or when do we know our advice and medicines have cured the patient? If these questions cannot be knowingly answered all medical opinions rest upon conjecture and speculation. Therapeutics is as demonstrable as anatomy or physiology.

We do not need theory, we need only analysis and reasonable tests. Observation and experience give us knowledge. Demonstration destroys myth and theory.

Known facts correctly recorded and re-tested are the basis of all subsequent intelligent cures. If our patient recovers after a mixed and conglomerate treatment we have no distinct idea of what cured. Our knowledge of what makes a patient ill is the foundation of that knowledge which we must use to cure. Man is made up of atomic and molecular forms of matter. Upon the timely combinations of these minute forms rests our healthy existence. There is no portion of our body which did not once unite with the blood corpucale before our organic tissues came into form. By atomic and molecular motions our whole being is protected, sustained and kept healthy. Without the forms of air, water and food we have no scientific idea of our elementary structure.

When we are supplying the wastes of the organic tissues as fast as they undergo uniform destruction and change, we know we continue our ordinary state of health. The opposite, the failure, rapid or slow is our idea of disease. The causes of such organic failures are innumerable, and many of them are well known. Organization is health, disorganization is disease. Both are a succession of form motions elementary in combination or separation. It is a fact well known to all medical men of thought and reason that one disease will cure another, similar in character, as sure as disorganization always preceeds organization. When every term in medicine means a distinct form or motion of human existence, there will be no advancing heretics in medicine. Who are the heretics, the ignorant or the knowing? Law will govern the observer and tester not myth and theory.

Drug poisons disorganize, and in proper quantity and in uniform relations will increase the healthy motions of organization. To cure means to reorganize. To disease is to destroy organic combinations. To know the one we must know the other as well. No knowledge without the contrast. We know best what did not do it after we find out what did it. The new motions set up in the body by a poison disorganize and change the form of the organic tissues.

After these new motions cease, the original elementary motions often increase, as in syphilitic disease the growth of hair is wonderfully increased in some persons after the primary symptoms have disappeared. By care

fully comparing the various conditions of health and disease under the use of disease producing causes, we learn the correct use of the same and become accurate physicians. Without such scientific tests, barbers and priests would be still controlling the guesswork in our valuable art.

Knowledge has superceded speculation and laying on of holy hands. In medicine reason has taken the place of faith. No reason without knowledge. No cures without forms and motions of the necessary elementary forms which make up every organic portion of the human body. To know these forms and combine them by comparative rest and motion is the knowledge needed by an earnest honest physician. What cures and who knows, is the order of success. To speculate or guess is not the true method. What does the word dynamic or the word vital mean more than the correct motions of organic or inorganic combinations? Organs created or destroyed.

When we attempt to reason about the unknown, *we call force or power in man*, are we not reduced to the words motion and rest as the rule of combination and destruction. A mere coming together or separation of the elements necessary to our existence.

The motion and rest of air, water, food and mental perceptions have much to do in the cure of those diseases caused by neglecting their proper use. Remedies have a curative action independent of the physiological and sanitary use of other forms of matter. This fact is true only to those who know by timely observation of the *uniform tested results.*

Those physicians who correctly test all kinds of remedies in their various forms and attenuations are the judges who know what remedies and potencies cure. Not the doctor who has decided against a remedy in any attenuation before a proper trial or test. Such dogmatic medical dictators cry out against the curative action of certain attenuations before they have any knowledge of their demonstrated use. They say "Moonshine," yet moonshine lights them better than the intense darkness of unmeaning denunciation. Dictators are of little consequence in the presence of those who have fairly tested a remedy in every available attenuation. Human testimony based upon trial and daily experience is far more reliable than denunciation without test or proof, standing as a mere authoritative denial. Who knows best, the physician who daily tests his remedies in the different attenuations or the doctor who has never tried but one or two low attenuations in all his practice? He knows best who makes the fairest tests and tells the truth in a non-partisan way. He who loves the truth for the sake of truth, that he may be *right himself* and cure his patients as he would like to be cured, is the man who knows what cures. The word cure is often too loosely used when the word palliative would be more correct. Removal of symptoms for hours, days or months does not amount to a cure if they return. The results following the use of the single remedy in single or often repeated doses very much increases our knowledge of what cures. Such recorded results can be tested repeatedly under the law of "similia" until certainty of cure will increase in equal ratio with all demonstrative science.

Without the atomic and molecular combinations of the elementary substances making up the human form; influenced by light, heat, and motion,

there can be no cure of disease. There can be no substitute for any one of the elementary substances entering into the composition of a healthy human form.

What substitute is there for oxygen, carbon or any one of the fourteen substances necessary to our existence?

Remedies modify their combinations in certain exact ways either in promoting organization or disorganization; increasing health or disease. By more accurately observing all the objective and subjective symptoms produced or removed by the single dose of each remedy, we will know what cures. All knowledge of disease or health has come by proving and testing in a scientific manner. Health like mind depends upon organization. No mind without form. No cure without the necessary forms and motions. Among the means of cure we cannot dispense with air, water, food, exercise, rest, temperature, mental conditions, cleanliness and medicines. To know and do is the office of him who cures. To be and enjoy is the result of health and correct thought.

XXXII.

Restraint or Non-Restraint.

By Selden H. Talcott, M. D.

That is the question which just now is exciting commendable interest on the part of the public; and comments of varying tone on the part of numerous writers. It is a legitimate question for careful and candid discussion. It is a question upon which the light of experience should be brought to bear with intensest blaze. It is a question, the final settlement of which should be made with great caution and deliberation, and with a view to secure the best possible treatment for the insane, as well as to render justice to those whose duty it is to care for them. It is a question of protean form, and susceptible of endless distortions and numerous complications. It is a question which produces profound anxiety in the breast of every man who assumes the grave responsibility of caring for the helpless victims of dethroned reason. And it is also a question upon which those unfamiliar with its practical bearings sometimes express immature, theoretical, and unjust opinions.

Apparently the popular cry at the present time is for *non-restraint* in the treatment of the insane. This cry is sent up by honest philanthropists who desire, as far as possible, the amelioration of those suffering under the visitation of insanity, and whom a benign or other fortune has placed in an asylum for treatment. Coming from such sources this cry should be promptly and tenderly heeded. Should, however, the cry arise from those who wish merely to advertise themselves as the apostles of a philanthropy which they never really possessed, whose whole lives exemplify only the doctrine of greed and gain, and who are practically unfamiliar with the real inner workings of those beneficent institutions—insane asylums—then the motive of the cry should be considered, that its

proper weight may be accurately determined. Still, a reasonable respect for the opinions of all should be constantly cherished. Every man in charge of the insane (or in any other work *pro bono publico*) should be quick to act in response to wise demands from the general public. But far beyond such stimulus should be the honest impulses and convictions of his own heart.

Whence came the famous reformers of asylum abuses in the past? From the populace, or from those noble workers whose lives were passed, with their patients, behind asylum bars? We are happy to note the fact that institution regeneration has sprung not from those who carp at the toilers, but from those who toil for the sick in mind, regardless of the sneers of those who carp.

Among the first of those peerless men who have labored earnestly to better the condition of the insane, and to unloose the shackles of unnecessary restraint, we find Robert Pinel—*Medecin en chef de la Salpetriere*—who in 1792, at the *Bicetre*, established in part the system of non-restraint in France. Thence the practice spread slowly over Europe; and the beneficent spirit which incited it still works with leavening power throughout the confines of civilization.

Following Pinel came Esquirol, who continued the good work so happily begun. Still neither of these distinguished French physicians, nor any of their successors were, or have been, able to entirely discontinue the use of restraint. But they put away much that was severe in kind, and greatly reduced the percentage of bodily bondage. More than this, they wrought greater reformations than the abolition of restraint, by regenerating the abodes of the insane; by introducing a system of decent cleanliness and abundant clothing as a substitute for the filth and rags that once prevailed; and by establishing a full and generous and varied diet in place of the scanty, half cooked food, formerly furnished.

But the bettered care of lunatics is not *wholly* due to individual effort, but to the spirit of the age in which reforms rise and prosper. That spirit which would tie to the stake and burn to death an innocent being, simply because that being dared to exercise the blessed right of private religious opinion, would with equal readiness, *punish* with thongs, and dungeons, and starvation, the hapless lunatic of its time. That spirit which recognizes and respects the rights of all religionists, likewise shields and protects from unjustifiable abridgment of their liberties the insane of its times.

Contemporary with Pinel, we find William Tuke laboring for the establishment and maintenance of that monument of goodness and justice—the "Retreat at York," in England. In this asylum was first practiced in Great Britain the benign principle of kindness to the insane, and with it a tendency to the disuse of physical compulsion. In this institution sympathy took the place of severity, and gentle persuasion superceded "stripes" and chains. As a "manager" of retreats for insane William Tuke stands at the head. His grandson, Samuel Tuke, continued in the same course, and at the same work; and thus the unextinguished torch of benign charity was handed down to other strong and willing hands. But these men did not wholly abolish restraint; they simply limited its use to what they considered absolute necessity.

In 1837, however, the feat of abolishing mechanical restraint was achieved, in its fullness, by Charlesworth and Hill at the Lincoln asylum. This was accomplished in that small institution, after a progressive experiment and persistent attempt of nine years duration.

It was not until 1839 that the great apostle of non-restraint—John Conolly, M. D.—began his marvellous work amid the broad opportunities offered in the massive asylum at Hanwell. Whoever reads Dr. Conolly's work, on the "Treatment of the Insane," is struck with the plain, frank earnestness of the man; and likewise with his enthusiasm which matches that of Paul in his efforts to convert the Gentiles. That Conolly accomplished mighty deeds in behalf of the insane we think no one will deny. That his example should be imitated everywhere, so far as it is practicable and right, we honestly believe. But there is an old adage that "circumstances alter cases;" and we hold that the adage is true in the management of the insane, as well as in other matters.

Now non-restraint has been advocated and tried in England, France, Germany, Italy, and in the United States. But England has been, thus far, preeminently the most successful field for the practice of this method. In France, the home of Pinel, restraint is still in vogue, although in milder and less objectionable forms than in the time of the great philanthropist. In Germany it is still used under the teachings of Van der Kolk and the sanction of the celebrated Leidesdorf. In Italy the necessity for its use is unquestioned. In America, not only in the United States, but in the Canadas, restraint is applied, with a strong tendency to careful discrimination we believe, under the direction of some of the most judicious and careful alienists in the land.

Now the question arises: why is non-restraint practicable in England, and why impracticable in other countries? Is it because the English are more humane than others? England boasts of many grand and generous souls, and her history is replete with records of courage; and coupled with the loftiest courage we naturally find those other great qualities of heart, namely, goodness, magnanimity, self-abnegation, and charity toward the weak and helpless. But, surely, no one familiar with their histories will charge either the Germans, French, or Americans with a lack of those same qualities which have rendered famous our English brethren. Moreover, we find the desire to dispense with restraint strongly implanted in the hearts of nearly all superintendents of asylums; and its use is deplored, although continued for purposes of safety and benefit.

What, then, are the causes for these varying results of non-restraint in different countries? We think they may be discovered in the marked diversities of climate, temperament, and *modes of treatment.* It is proverbial that the climate of England is *quieting* in its tendencies, while that of France is exhilerating, that of Germany exasperating, and that of America is both cosmopolitan and changeable. The English are a slow-going, though steadily progressing, people; the French are light, gay, passionate; the Germans phlegmatic, stubborn, irascible; while Americans are "all things to all men." These differing influences of climate, and different forms of temperament, result in governments, and modes of life as antipodal as are their causes. If you find these opposing forces in the

green wood, how much more in the dry? If the sane differ in thought, speech and action, why not the insane?

But let us examine the *mode of treatment* as practiced in the English non-restraint asylums. While appliances to the body are dispensed with, there yet remain, in approved use, the padded room, and the hands of strong and numerous attendants. The former appears to me objectionable on account of its inevitable uncleanliness, the padding quickly becoming charged with the emanations of the confined patient. This padding is of coir (cocoanut fibre) and is covered with heavy "ticken," which is readily soiled, but not easily cleaned. These padded rooms are small, and but dimly lighted by an insignificant window near the ceiling.

The *temporary* duress of a patient, at the hands of attendants, is, to me, restraint in its worst form, for it simply amounts to a contest for the mastery between the insane man and his keepers, in which both are extremely liable to lose temper. What can be more humiliating or disgusting than to be held in bondage by the rude hands of attendants who are likely to be selected for such work mainly on account of their superior physical strength. Yet this is a method we are asked to adopt in the place of easy fitting canvas sleeves, which merely prevent the hands from accomplishing some attempted work of destruction, and which do not prevent the patients walking about, nor do they put any portion of the body in an unusually constrained position.

Again, the facility with which non-restraint has been practiced in England appears to depend largely upon two causes, namely: the use of soporific, and debilitating drugs; and particularly the use of immense quantities of stupifying ale and beer. It is a well known fact that many of the large English asylums have their own breweries, in which are manufactured the liquors consumed in the establishment. It is also stated by impartial visitors that they have frequently seen inmates at these asylums "too full for utterance." To stupify the insane with beer may produce a condition of mind which calls for no restraint and little care; and thus the popular demand for non-restraint may be acceded to. But the question arises: what are the results of such treatment? Is it well to fill the body with that which dulls the mind and plunges it into the hopeless pit of dementia, or is it preferable to wisely restrain wild and vagarious action, temporarily, and with means that can be readily dispensed with? The latter method is under constant control; the former is not. Cases that would undoubtedly recover under mild restraint, with proper diet and appropriate and watchful care, are sometimes hurried into dementia by the unwise course just alluded to. To this fact—that immoderate stimulation with beer and other liquors hinders rather than helps restoration of the insane—the superintendents of some of our Canadian asylums are rapidly awaking, as their recent reports abundantly testify.

Again we ask attention to one of the measures used and commended by Dr. Conolly himself, for the purpose of subduing a violent or excitable patient. He says: "Cold water poured upon the head is sometimes of signal service;" and following this statement he proclaims that "the full use of the shower bath can only be cautiously obtained by repeating the shower at short intervals (in a bath supplied by a cistern) and *until de-*

cided prostration ensues!" It would seem to some that the inducement of "decided prostration" by such means is neither as safe or pleasant a procedure as the application of mild restraint. It looks like a modification of that severest form of prison punishment, termed "showering."

We have spoken briefly of non-restraint as practiced in England, and of a few of the modes of treatment accompanying it. We shall presently speak of another of its disadvantages.

At this asylum, as in fact at many others throughout the United States, restraint is used for three purposes:

First—To prevent the injury of others.

Second—To prevent suicide and self-mutilation.

Third—For purposes of treatment.

Restraint is never applied at this institution except by order of the superintendent or one of his assistant physicians. It is always dispensed with at the earliest practicable moment. If sudden violence calls for its use, when a physician is not on the ward, the case is at once reported to a medical officer, and its continuance depends upon his decision. It is both the duty and desire of the officers to restrict the use of restraint to the minimum. This is the end at which we aim, and the course is deviated from only for the purpose of accomplishing the highest possible curative, protective, and beneficent results. The staunchest vessel, with the strongest crew and bravest captain, cannot always sail against wind and tide, in a direct course. It must occasionally tack that it may make the better and surer progress. Those are the truest reformers who calmly face the dangers and difficulties of the situation, and exercise a wise judgment and careful discrimination before they act. Guided by matured plans, drawn upon the scene of action, their efforts will not fail of good and lasting effects. The path of duty may wind around the hill, but those who follow it always face the goal of final success.

Three years ago, in my first annual report, under the head of "Restraint," I wrote: "This is a matter of vast importance to every person in charge of an asylum, since it relates more or less directly to the welfare and highest interests of the patients committed to his care. That its use should never be applied, except after careful consideration, and as a last resort in each individual case, is the conclusion of all modern humanitarians. Mechanical restraint, in this asylum, has been reduced as far as considered practicable and safe; but it has not yet been entirely done away with."

The plan marked out, some years ago, is still steadily adhered to. That it is successful, the record, as found in our statistical tables, abundantly attests.

In the English asylums, mutilations of the body are not uncommon among the patients. As they cannot be restrained, such accidents can scarcely be prevented. As we have already stated we here use restraint to prevent mutilations. By proper appliances we have been enabled to prevent all serious accidents of this kind. We present two or three cases that we have treated in which we think restraint was effective in saving life. Mrs. —— for a long time persisted in hunting for needles, pins, and other sharp objects, and when found would bury them in the flesh of her arms and legs, and other portions of her body. Severe and dangerous

inflammation followed, but she was even then not deterred from these strange attempts at self-injury. Her hands were restrained, for a few days, with light canvas sleeves, until the passion for such acts passed away, when she was released; and in a short time she went home fully recovered. Such a patient must either be kept in a close room, and deprived of all the enjoyments of association with others; or be permitted to mutilate herself, and endanger her life; or be restrained. We preferred the latter course, keeping the sick one in a light, cheerful, carpeted room, surrounded by good-natured companions.

Another patient of ours persisted in thrusting his thumbs into his eye sockets for the purpose of pulling out his eyes, because "the Lord had commanded him to do so." He injured his eyes severely, but was soon discovered, and his hands placed in restraint until he received no further orders from the Lord to thus mutilate himself. He is now one of the most quiet and happy of patients; and has a pair of sound eyes in his head. This patient's attempts at mutilation were continued for several weeks, night and day. He was removed from restraint each day and carefully exercised. Does any one think that a padded room would be a safe protection or proper treatment for such a case?

Still another patient persisted for a long time in attempts at suicide. Her efforts were simply marvellous in their varied ingenuity. It would be impossible to describe her transcendent energy in this direction. Her hands were restrained, while necessary, and her life saved. She was repeatedly set at liberty, and watched over with tenderest care, by a faithful and devoted nurse, but at times nothing would avail save restraint; for in unhallowed cunning the patient could baffle the elect. Finally her desire to destroy herself became modified, and she now spends much of her time quietly sewing.

Such are a few of the cases with which we have to deal. We do not plead for the use of restraint because it is a pleasant or agreeable method, but because it is, to our mind, sometimes, an unimpeachable necessity. Its use requires careful discrimination, and close scrutiny. That it may be carried to extremes is true, as the history of the past too sadly evidences. But in this connection, the question also comes: "May not the system of non-restraint pass the bounds of discretion, and, in some instances, become chargeable with the sin of undue neglect?" A righteous decision of all mooted questions is the highest aim of the age in which we live.

Concerning the fact that kindness—ever gentle, ever discreet, ever firm—is, and should be, at all times exercised toward the insane, we can only say that we believe it is now universally considered as an axiom of our times—changeless, indisputable, uncontradicted. Whether restraint is used or not used, kindness with its mystic wand, should rule with resistless power in every asylum for the insane.

XXXIII.

Causes, Courses and Treatment of Mania.

BY SELDEN H. TALCOTT, M. D.

The most common form of insanity, except melancholia, is mania. Hence it is of highest importance to the physician that the causes of this mental malady, its incipient as well as its defined symptoms, its courses, its varying phases and numerous varieties, its terminations, and, most of all its successful treatment, be fully and practically understood.

The term "Mania," from the Greek means a raving or furious madness. It is used to express all forms of intellectual or emotional excitement, where there is exaltation of the mental faculties, delusions of innumerable types, hallucinations of sight and hearing, and those ever varying disorders of the mind, which are made manifest by erroneous judgments, incoherent sayings, and incongruous acts.

Through all the workings of a thus unbalanced brain, there runs a more or less constant series of impulses to works of fury and violence. Hence the term, "Mania," a most fitting word to convey the intended idea of a human mind given over to the demon of unrest.

The form of insanity which we shall attempt to describe is a favorite form, so to speak, of writers in all ages. We find descriptions of the disease, examples both real and feigned, engrossed upon the pages of "Holy Writ," our attention is fixed, as if in rapt gaze upon a strange, weird picture, by the masterly delineations of mania in Shakespeare's "King Lear;" we read with suspended breath the descriptions of Dickens, and Scott, and Charles Reade, as each presents, in his own vivid style, some harsh jarring specimen of profound mental aberrations, and throughout all literature these anomalies, or abnormities of human nature come to the front, and display themselves as fascinating fantasticals in the solemn procession of real or fictitious life.

CAUSES.

The causes of mania are put down in the books (and with approximate approach to truth) under numerous heads, such as, loss of property, mental anxiety, overwork, disappointment in love; ill health, injury to the brain, and by numerous other expressions which denote that the victim has experienced, during his earthly sojourn, some unfortunate disaster in mind, body or estate.

Now while these may, with propriety, be recognized as, in a measure, exciting or stimulating causes, I believe we must go back of the immediate presence of worldly misfortune to the individual to find the primary causes which impel men and women to slip their hold upon the rock of reason, and embark without rudder or compass upon the precarious and stormy sea of insanity.

Here we face the question of hereditary influences—a question of profound depths, and multitudinous complications. No one doubts the fact of resemblances in families of form and figure; can any one doubt, then, the fact of hereditary vices or virtues, or of inherited physical or mental vigor or frailties.

We recognize this truth that some men are possessed with an inborn martial spirit, because they were "set from fathers of war proof," we regard as a natural consequence the bold, liberty loving, danger braving spirit of the Green Mountaineer, the Scotch Highlander, or the Swiss Peasant; and we also look upon the abject, dependent spirit of the sons of Ham as a result of longbred, inherent qualities, quite as much as a decree of Providence. The denizen of the desert is a *nomad* because his father was one.

The citizen of the crowded town has a taste for business enterprise because the necessary qualities are, in a large degree, inborn.

Now it is just as easy to conceive that a man is born to be insane, as that he is born to be free in spirit, or reckless in manner, or dependent in action, or presistent in energy. The natural bent of some minds is to take on, so to speak, incoherency of thought and action. They are always tumbling into the quagmires of the incomprehensible and floundering therein; or they soar aloft into regions unexplored, not with the enterprise and forethought of the enthusiastic discoverer, but because they lack the ballast necessary to keep them in the modest ways for which they were designed.

Men and women come into the world, through no fault of their own, in the guise of guileless infants, whose inevitable terminus is the dreaded goal of insanity. They can no more change their fate than they can overleap the dark river that flows between this world and the next.

The toxic influences of wrong living and wrong thinking pervade their whole being while yet occupying a chaotic residence in their father's loins.

Dr. Johnson tells of "Frankenstein" a monster in Mrs. Shelby's romance of that name, which was created out of the remnants of the churchyard and the dissecting room, by a student, and fashioned into the physical frame work of a man wanting only the living soul to animate it. The student, fascinated by his work, conceived the idea of breathing vitality into the inanimate man, and by the aid of galvanism succeeded in endowing it with a sort of spectral convulsive life. In a word a deathless spirit took up its abode in the image. But it was malignant and hateful, wanting in love and destitute of moral feeling. Conscious moreover of its own deformity, its existence was rendered unsupportable by its vain craving after human sympathy, and the student was horrified with his own workmanship. He could not recall the life of the creature he had made. It dogged his footsteps, haunted his sleep and was employed in inflicting the most dreadful retribution on the guilty philosopher. Such is the fiction—what is the fact? Is not every vicious godless parent the creator of a Frankenstein? Are not men and women full of corruption and wickedness producing children in their own hideous moral likeness and with all their abominable characteristics? Are not the moral monsters made every day?

Think what incipient hells some homes of iniquity are, and tell me if anything else than Frankensteins can be born and bred there.

This is an awful fact and as suggestive as awful. It indicates what parents must be in order to save children. A worldly parent can not look for a spiritual child. A parent who practically prefers the enjoyments of this world, can not expect to be blessed with heavenly tempered

offspring. What parents do and how they live and what they are, these are the formative forces in the household. And with the mother the work begins the moment being is given to one of these immortals.

Parental influences, tending to insanity, are most marked. In the history of a case, at the asylum under my charge, is recorded the fact that during the first pregnancy the mother was beset by an unusual and peculiar train of cares and apprehensions. The child, the fruit of pregnancy, now a woman grown and insane, resembles the mother in spirit, as she was during this unhappy period. While yet a young girl, surrounded by every inducement to cheerfulness and contentment, she worried strangely over every real or fancied care in life. She "took everything hard" as her friends expressed it.

At length she broke down under the load of worriment she had accumulated to herself, and became insane. Insanity, in this case, was produced, clearly and unequivocally, by a train of deplorable physical influences transfused into the offspring by the mother during pregnancy. There are numerous such cases on record. Sisters of the above mentioned patient, born subsequently, and under favorable circumstances, show no tendency whatever toward mental unsoundness, nor is there any history of insanity in the family.

Now as all facts have their lessons, these prenatal causes of insanity should be regarded as a warning to the medical profession to guard, if possible, their coming clients against those portentous ills, which may be avoided, but can hardly be relieved when once lodged in the brains and lives of human beings.

Again the experiences of what the poets term, "Childhoods happy hours," are often those which tend directly toward the formation of the insane temperament. Nursery tales in the ghastly shape of horrible ghost stories; threats of punishment by irate parents and cruel nurses; legends of all devouring bears and other hideous destroyers of innocent babes; the untimely rod, and the lonely dark closet; all these, by conjuring up fear exciting apparitions and apprehensions to the sensitive minds of these unfortunate children, so work upon their delicate brains to set them all awry, and prepare them most surely for the sad fate of padded rooms and asylum bars.

Some children are born and bred to insanity just as surely as some races are born and bred to be soldiers, or huntsmen, or mariners or merchants, or plodding tillers of the soil, or patient fishers by the sea. Witness the case of a young girl at the New York State Homœopathic Asylum, who numbers seventeen cases of insanity among her immediate relatives! Such cases as those to which I refer come into the world with deformed heads, and poorly constructed bodies. (I am not now referring to idiots or imbeciles but those with strong but erratic intellects, inevitably inclined to insanity.) In these unfortunates one side of the brain is much larger than the other side; one ear is set higher than the other; they are squint eyed, and have noses toppling athwart their countenances. Their foreheads are pinched and retreating; their backheads bulging to one side; and even the hair grows by nature as if it had been swept and lodged, like a field of oats, by a hurricane or whirlwind. Their cheek bones are too high or too low; their mouths are ill cut;

their lips have an uncanny shape; their entire faces have a sinister cast; and in all their outward appearance they betray the inherent crookedness of inward mental action. Under these circumstances, is it any wonder that the crop of lunatics is increasing? And again the question arises: can these physical deformities, leading to mental uncomliness, be remedied? We believe they can. A club foot is made the subject of anxious and solicitous care; and the trouble is often remedied. Why may not a *club brain* be handled into proper shape, while as yet the articulations are but half matured, and the fontanelles unclosed?

Lack of brain poise at the outset, and lack of proper, physical, and mental culture, subsequently are, we believe, the crowning causes of those intellectual aberrations known to the profession under the significant title of "Mania."

These causes are but rarely recognized, or acknowledged as such. How much easier and more delicate it is to tell the mother that her daughter has become insane, through a real or fancied slight put upon her affections, than it is to say that her child was born with an ill-shaped head, or that her early training was deficient and faulty in the extreme. How much more popular is that physicians verdict who declares that the young man has studied too hard, or applied himself too closely to business, than the statement of another, who seeking the real cause, and not a pleasing excuse, plainly tells you that the brain was bent at the outset, and never straightened by judicious training in youth.

The whole course of modern brain culture for the young needs re-exploration, and the flag of danger should be hoisted at the proper points, that we may avoid the scylla of unwise forcing, and the charybdis of undue neglect. This statement surmises other and dangerous causes of mania, prominent among which are: premature straining of the mental faculties by too early and too protracted study, and the too long following of the intellectual field, there by admitting the growth of unprofitable weeds. These latter cumber the ground of mentality and their only fruitage consists of distorted fancy, a disordered imagination, and the most hopelessly vagarious views of life. A broad, comprehensive, and varied culture, which shall develop all the mental and moral faculties, in a systematic and thorough manner, is the safest course, and the only hope of those whose natural bent would incline them to burst the bonds of self-restraint, and unloose their grasp upon the anchor of reason.

We have written of prenatal influences, and the influences of faulty education as among the prime producers of mania. These may very justly be termed, impelling or predisposing causes of the disease. We now approach what may be termed immediate or exciting causes, and shall divide them under the heads of physical and moral.

We quote in the main a list made up by Dr. E. T. Wilkins, Commissioner in Lunacy for the State of California.

ASSIGNED CAUSES OF INSANITY.

PHYSICAL CAUSES.	MORAL CAUSES.
Congestion of the Brain.	Mental Labor and Excitement.
Phroenitis.	Mental Fatigue.
Epilepsy.	Mental Shock.

PHYSICAL CAUSES.

Convulsions.
Arachnoiditis.
Apoplexy.
Hydrocephalus.
Nervous Irritation.
Excessive Pain.
Neuralgia.
Typhus Fever.
Nervous Fever.
Bilious Fever.
Scarlet Fever.
Intermittent Fever.
Yellow Fever.
Gastritis.
Measles.
Gout.
Dyspepsia.
Dysentery.
Erysipelas.
Phthisic.
Rheumatism.
Bilious Rheumatism.
Suppression of Hemorrhoids.
Suppression of Perspiration.
Suppression of Secretions.
Suppression of Eruptions.
Suppression of Tumor.
Suppression of Fistula.
Small-pox.
Varioloid.
Irritation of the Spine.
Disease of the Spine.
Ill Health.
Ill Health and Solitude.
Ill Health and Perplexity in Business.
Ill Health and Family Trouble.
Ill Health and Pecuniary Difficulties.
Ill Health and Lawsuit.
Old Age.
Irregular Decay of Powers in Old Age.
Injuries.
Concussion of the Brain.
Lesion of the Brain.
Blow on the Head.
Fracture of the Skull.
Burn on the Head.

MORAL CAUSES.

Mental Perplexity.
Excessive Study.
Study of Metaphysics.
Study of Phrenology.
Excitement of Lawsuit.
Politics.
Political Commotions.
Excitement of the Mexican War.
Excitement of Visiting.
Sea Voyage.
License Question.
Anti-Rent.
Fourierism.
Preaching Sixteen Days and Nights.
Blowing Fife all Night.
Application to Business.
Reading Vile Books.
Seclusion.
Sudden Joy.
Hope.
Day Dreaming.
Ecstatic Admiration of Works of Art.
Seduction.
Domestic Affliction.
Domestic Trouble.
Family Affairs.
Bad Conduct of Children.
Ill Treatment.
Ill Treatment from Husband.
Ill Treatment from Parents.
Abuse from Husband.
Infidelity of Husband.
Infidelity of Wife.
False Accusations.
Imprisonment for Crime.
Difficulty in Neighborhood.
Avarice.
Anticipation of Wealth.
Speculation in Stocks.
Speculation in Morus Multicaulis.
Speculation in Lottery Tickets.
Perplexity in Business.
Loss of Money.
Pecuniary Difficulties.
Disappointment in Business.
Loss of Property.
Reverse of Fortune.
Fear of Poverty.

PHYSICAL CAUSES.

Fall.
Kick on the Stomach.
Surgical Operation.
Mesmerism.
Insolation.
Want of Exercise.
Sedentary Habits.
Idleness.
Insolation and Drinking Cold Water.
Exposure to Excessive Heat.
Exposure to Cold.
Bathing in Cold Water.
Sleeping in a Barn Filled with New Hay.
Tight Lacing.
Excess of Quinine.
Metallic Vapor.
Prussic Acid Vapor.
Charcoal Vapor.
Pregnancy.
Parturition.
Abortion.
Puerperal.
Cold in Child Bed.
Lactation.
Sexual Derangement.
Disease of the Uterus.
Irregular Menstruation.
Profuse Menstruation.
Suspended Menstruation or Change of Life.
Suppressed Menstruation.
Hysteria.
Carbonic Acid Gas.
Working in White Lead.
Acetate of Lead.
Excessive Labor.
Intemperate use of Tobacco.
Intemperate use of Opium.
Syphilis-Vice and Immorality.

MORAL CAUSES.

Death of Relations.
Death of Husband.
Death of Father.
Death of Son.
Sickness and Death of Friends.
Murder of a son.
Anxiety.
Anxiety and Loss of Sleep.
Anxiety for Absent Friends.
Home Sickness.
Fright.
Disappointment.
Disappointment in Love.
Disappointment in Ambition.
Unrequited Love.
Want of Employment.
Destitution.
Mortified Pride.
Ungoverned Passion.
Violent Temper.
Misanthropy.
Jealousy.
Envy.
Duel.
Religious Anxiety.
Religious Excitement.
Remorse.
Millerism.
Mormonism.
Struggle Between the Religious Principle and Power of Passion.

A glance at this list will satisfy every one that the causes which may disturb the regular action of the brain are both numerous and appalling. While some of them may be considered as more strictly the producers of melancholia, (and perhaps some other types of insanity), yet as mania often alternates with melancholia, and is, in fact, one of the frequent liabilities in almost every type of mental disorder, we trust we may be pardoned for reproducing the entire category, as a list embracing quite fully the various influences predisposing to Mania.

Charles Dickens, a most astute observer of human nature, in his description of the old maniac who desired so much to marry Mrs. Nickelby, gives a part list of causes, through the mouth of the insane man's keeper, as follows: "It was a blessing he went mad at last, through *evil tempers*, and covetousness, and selfishness, and guzzling, and drinking, or he'd have drove many others so."

To conclude and condense, we will specify as the most frequent causes of mania, subsequent to hereditary, and deficient mental capacity and training, First, overwork, both physical and mental; second, undue anxiety, as regards both temporal and spiritual welfare, particularly spiritual; and third, intemperance. By the latter term we mean excess in drinking spiritous liquors, excess in the use of tobacco, opium, and other narcotic drugs, and excessive venery. Temperance in all things is a physiological as well as scriptural law of necessity.

VARIETIES.

The form of insanity, which we are attempting to describe, has numerous varieties. We shall proceed to classify them as follows:

General Forms.—Acute, Subacute, Chronic.

Special Forms.—Recurrent, Circular.

Peculiar Forms Named from Supposed Causation.—Traumatic, Masturbatic, Syphilitic, Puerperal, Hysterical, Amenorrhœal, Climactric, Ovario-uterine, Post-connubial, Phthisical or Tubercular, Metastatic, Post-febrile, Senile and Dipsomania.

Monomanias, So called.—Kleptomania, Cretomania, Nymphomania (Satyriasis in men) Homicidal, Suicidal and Pryromania.

SYMPTOMS AND COURSE.

We shall now devote a brief space to the symptoms and course of those forms which come under the head of "general." The others will by their names sufficiently denote their tendencies, although we shall again refer to those of the most importance.

Acute mania is usually preceded by mental depression. This depression is accompanied by a disposition to brood upon a single fascinating topic. Dr. Johnson, the great English moralist in his famous work entitled, "Roselas," has traced with a master hand the slow sinuous advances of mental derangement. He says: "Some particular train of ideas fixes upon the mind; all other intellectual gratifications are rejected; the mind, in weariness or leisure, recurs constantly to the favorite conception, and feasts on the luscious falsehood, whenever it is offended with the bitterness of truth. By degrees the reign of fancy is confirmed. She grows first imperious, and in time despotic. These fictions begin to operate as realities, false opinions fasten upon the mind, and life passes in dreams of rapture or of anguish." Struggling under these ill-defined and misty influences, the patient feels painfully the slow gatherings of an unseen storm.

He becomes anxious, apprehensive, wakeful, and haggard, a sense of intolerable unrest pervades his entire being; yet he may, for a time, be able to conceal there sensations from his most intimate friends, by calling to his aid all the reserve powers of self control. Gradually sleep forsakes his pillow and the appetite becomes capricious and irregular. Dark,

gloomy thoughts pervade his mind, as damp vapors infest the valleys. Delusions creep in which he is unable to banish. He fancies himself being followed, and turns often to look at his supposed pursuers. He imagines that his life long friends are failing him. Confidence in his fellows gives way before ill-starred distrust. He begins to suspect that his food is being drugged: that the medcine he may be taking for some bodily ill is a patent poison; that he is being practiced upon with electricity; that the ground he treads is his adversary, and that the very air he inhales is a stifling breath from the bottomless pit. Charged with these false beliefs, which grow stronger and more conclusive day by day, his mind becomes a pent up volcano, ready to belch forth on the slightest provocation. The whole current of his life becomes gradually and almost imperceptibly changed.

His daily toil grows to be an unendurable load, which he vainly seeks to throw off. The social pleasures of life have lost their fascinations. He is given to seclusion and to brooding meditation. The slightest cross to his wishes provokes him to anger; the least unusual anxiety induces fits of rage.

He yields his interest in both toil and pleasure; he neglects himself, and becomes shabby in person; he ceases to care for his family, and is inclined both to jealousy, and to unnatural hatred of those who were formerly dearer to him than life itself. The victim of incipient mania no longer lives in the present, but is doomed for a season to morose contemplation of the past. "The images which memory presents," under such circumstances, "are of a stubborn and untractable nature."

A persistant reviewing of these is a course destructive to normal mental action. Finally the upheaval comes. The bonds of propriety are suddenly snapped assunder. The patient yields himself abjectly to the seven devils of passion, which impel him to the commission of the seven deadly sins. No description is adequate to the practical reality. Honest men are transformed into deamons, ready for any crime; pure women become shameless, obscene, hideous. Mania is human nature unmasked, a condition which shows up, in a lurid glare the depths of total depravity, a wild and incoherent train of thought is manifested with the most loquacious abandon. Incongruous as each succeeding remark may be to its precedent there yet runs a thread of continuity through the whole agglomerate mass of illogieal reasoning. There is a certain fixedness of ideas in spite of the irregular and irrelevant modes of expression. Each day brings a repetition of the same thoughts, but often with original rhetoric. The patient is constantly pursued by the same parties, or poisoned by the same hand, or maligned by the same tongue. In this there is a "method in the madness." The various and ever varying statements of the same all pervading idea and the marvellous flights of imagination thus indulged in, would form a chapter of interesting curiosities.

The physical condition in a case of acute mania simulates the middle courses of typhoid fever, although there is less failure of the life forces. The appetite generally remains good, and the strength is thereby conserved. Mania is a disease characterized by protracted daily and nightly restlessness. In typhoid fever the patient may be kept in bed without restraint; the mania patient cannot. The skin in mania is hot and dry,

but it is quite apt, during paroxysms of undue excitement, to be bathed in perspiration. The tongue, at the outset, is somewhat coated; and the breath is intensely and indescribably offensive. The "insane breath" is a novelty; once appreciated by the nostrils it is never forgotten. If mania progresses with marked severity the tongue becomes red at the tip and edges, and in fact is often red throughout, with a tendency to get parched and brown. The lips are frequently dark and cracked and there is sordes upon the teeth. The face is drawn and haggard; the lines deepen perceptibly; and there is a marked scowl upon the forehead. The eyes are wild and glaring, even in moments of enforced composure. The pupils are generally dilated, though occasionally contracted. The pulse is somewhat quickened, and is hard and wiry. In some cases it rises to one hundred and twenty, or more; but in others it is not greatly accelerated. Its "feel," rather than its rapidity is to be considered as diagnostic. The pulse in mania is *harder* than that found in an ordinary fever. There is an intensity of action, such as is found in no other form of disease. The temperature is moderately elevated, but not so much so as one would expect from the existing excitement. The appetite, at first capricious, generally improves, and the patient if carefully fed will often eat enormously. This great consumption of food is necessitated by reason of the abnormal wear and tear to which the system is subjected. If left to himself the maniacal patient would starve from utter inattention to his own wants. Digestion at the outset is frequently impaired, but is better after the patient has past the ground swell of excitement. The bowels are inactive through neglect of natures demands; and constipation is quite prevalent among cases of mania. The urine is high colored, often scanty, and loaded with phosphates and urea.

The course of acute mania ranges from one to six months. The length of time it may last depends largely upon the age, sex, predisposing causes, period of incubation or length of prodrome, number of attack, and upon numerous other conditions. It is never safe to predict the time at which an attack of mania will terminate. The disease has no certain or even probable course. If it is a first attack, the person young and of good physique with a tolerably healthy family history; and if the patient has elastic spirits and is impressionable to favorable influences, the prediction of recovery may be limited with approximate accuracy to from three to six months. But since most of these cases are burdened with unfortunate complications, it is highly unsafe to make any positive prognosis. If there is marked heredity, if masturbation is recognized as a cause (not as a consequence of the insanity) or if there are strongly developed and long continued hallucinations of hearing, then the prognosis should be doubtful. If the case is one in which heredity is clear, it may recover, but will be very likely to suffer a relapse at no distant day.

The delusions cherished by maniacal patients are almost innumerable, and some of them are of a most curious nature. One of our patients cherishes the sincere belief that she is an atom of dust, and ridicules herself for speaking, or eating, or for performing any of the ordinary acts of life. Another says she has not been born yet, and claims that her head is on fire. Still another can never get the words right, and works herself into a frenzy over words which get "all mixed up," according to

her delusion. This one thinks at times that the letters are all turned into s's and z's, and that it will take a life time to get them straight. Yet this patient always talks correctly, answers a question promptly and clearly, and is finely educated. Another patient has for years persisted, each day of her life, that she never stole Charlie Ross, and never burned Chicago. Another sees showers of gold come down from heaven every night, but, inspite of her profuse supply, refuses her attending physician even a bucket-full in the morning. Another accuses the doctor, when on his daily rounds, of having cut out her heart and lungs during the night; and also charged him with having removed her stomach and smeared the same with mustard. This latter insult she resents with great vigor; she says she dont care for the heart and lungs, but when it comes to smearing her own stomach with mustard she declares it to be, "taking undue liberties with her person!" One patient thinks herself the Queen of England; another is the King of Babylon; while still another is the greatest general on earth. These are somewhat common delusions, and in every asylum are to be found patients decked out with gaily colored rags, which they deem insignia of the highest rank. Mrs. A. says she is "the Saviour, and Judge of the quick and the dead." Mrs. C. thinks she is fed with bread from heaven, and water from the rock. These are brought to her daily, by birds with tinsel wings. On the other hand Mrs. W. believes that the chief devil talks to her all the time, and tries to fill her mind with evil thoughts, and finally one woman says she feels like a watch that has been opened, spit into, and shut again. Such are a few of the opinions which prevail, and control human action, within the fortunately limited realms of the mad world.

What ever delusion pervades the mind of the patient it is followed up with transcendent energy. All times are alike to him.

Night and day he pursues his work with ceaseless vigor. His strength fails, but he does not realize it. The weaker he is the more active and agitated he becomes, all things centre in himself. He is the hub of the intellectual universe. He thinks, talks, and acts as if he were the only person on earth. The insane, as a rule, grow to be intolerable egotists. They never listen to the woes of others, and consider only their own troubles. These they inspect as through a microscope, discovering new depths of sorrow and wrong, all their own, as their disease progresses. If they look up they see domains of bliss, of which they are sole possessors; if they look down they behold a personal bottomless pit. The acute mania case is often dirty, lewd and quarrelsome. Full of mischief they seek to brew a pandemonium about them. They will grossly assail and insult their attendants, and if, properly restricted, will then bitterly complain of their treatment, pouring a frightful tale of grief into every listening ear. Acute mania patients almost always bury the Washingtonian hatchet of truth, and they seldom dig it up until reason is restored. Even after recovery the vista of the past is blurred and confused, and the patient's retrospective history is given under the blinding influences of the smoke of a fact destroying mental battle.

A mild but somewhat persistent form of mania is that termed subacute. The patient does not suffer from those violent outbursts of passion or long continued paroxysms of excitement so characteristic of acute mania;

but he cherishes the same general delusions, and possessses, in a mild degree, the same physical and mental peculiarities. The subacute mania patient is cunning, self poised, and deceitful, and will often induce the conviction in the minds of the unwary that he is not insane. When, however you hit upon his chief hobby he becomes aglow with excitement, which is most frequently manifested by a certain muscular tremor, an unsteadiness of the voice, like a person laboring under suppressed passion, and a glaring brightness of the eye. Such cases often fancy that every man's hand is against them, and hence are exceedingly jealous of their rights. These are the patients who are always threatening to sue the asylum for damages, and who are constantly trying to escape, or who seek liberty through the means of a *habeas corpus*. They are generally clearly bright, apparently cheerful, and, while in the asylum, under good self control, but their deceitfulness, craftiness and impulses to wreak revenge for fancied slights, when at large, call loudly for proper care and treatment.

Mania terminates either by death, recovery, or chronicity. A small proportion run down and die within a few weeks of the inception of an attack.

From sixty to eighty per cent. of acute cases, if the patients are in the prime of life, recover. The remainder drift through the long and tortuous channel of chronic mania into the trackless ocean of Dementia, the serro-watery grave of the mind!

In chronic mania the patient persists in his former delusions, and they become so fixed that they may really be considered as a permanent part and parcel of his life.

These delusions, though still cherished, become somewhat modified or toned down; in fact all mental impressions, in this state, are of a distorted and unshapely nature. The patient's general condition is that of slow but sure decadence. His mental and physical appearance is like that of an old and creaking vehicle, which has been racked by hard running, which has grown weak, wabbling and illogical in its parts, and which rattles and squeaks loudly, but still continues to run. In chronic mania the patient is sometimes steadily and continuously noisy, dirty or obscene; sometimes he is quiet and cheerful, or again stubborn and morose, with occasional outbursts of violence. In these latter, mental excitement is quite apt to rise and fall with considerable rythm, periodicity and regularity.

In recurrent mania the patient experiences complete recovery, or apparent remission of all symptoms of insanity, but the attacks are repeated at intervals varying in frequency from one month to two years. In one instance is recorded the case of a woman who recovered forty-seven times from mania, dying finally, during the forty-eighth attack.

In circular mania there is an alternation of mania with melancholia. A general argument against alternation (!) is the fact that victims of circular mania hardly ever recover; a remarkable, a typical case of circular mania at the asylum is that of a lady patient, who for years has lived in the following manner. For four weeks she lies passively in bed, and no inducement whatever can rouse her to any physical or mental action. During this period she is much depressed in mind, will scarcely speak,

and answers questions only in monosyllables, eats but little and sleeps a good deal. Toward the last of this period of decubitus, she brightens up, improves in appetite, becomes cheerful and talkative; and on the day following the completion of this monthly semester, she leaves the bed, dresses, and appears upon the hall the most loquacious of women, and, the most ceaseless in activity as well as the most imperious in her numberless demands. At times she is intensely excitable, obstinate and mischievous. During the winter season she is much more inclined to violence than during the warm and pleasant weather of summer.

Under the head of "peculiar forms," we have a class of mania whose names indicate, in a measure, both their causation and their special tendencies. As their courses and treatment do not vary materially from the same in acute mania, we shall dispense with a protracted description of the idiosyncrasies of each form.

By the mono-mania we understand those singular cases which develop insanity upon one point, and which appear to be sane upon all other points. It is, however, a recognized principle in the jurisprudence of insanity that if a man is insane in a single marked degree, he is essentially and conclusively *non compos mentis* in the eye of the law.

TREATMENT.

The treatment of mania is a difficult and delicate task. All the resources of skill, tact and judgment of the physician are called into constant requisition by this class of patients. Cases of mania used, as a rule, to be secluded from their friends, and retained, until their recovery, in a proper hospital for the treatment of the insane.

This course is necessitated by reason of the fact that the exciting cause of the trouble is often found in home disturbances or business cares; that the patient frequently cherishes an unwarrantable prejudice against his dearest friends; and that, from a tendency to violence, himself and those around him are in constant and serious danger of bodily injury. Therefore, removal from those scenes and surroundings which might possibly have an unfortunate effect, and where unrestricted liberty might involve the loss of a precious life, to a place where the whole course of thought and action is necessarily changed, is, in the majority of instances, the wisest and safest plan.

Hospitals for the insane have been renovated and purged of their doleful aspects, of their bare walls and cheerless dark rooms, their chains, their thongs, their scourges and shower baths, during the last eighty years; and in their place everything that is bright in nature, or beautiful in art, or inspiring in spirit, has been substituted through the demands of an enlightened age, and by the munificence of a more charitable and sympathetic people. As a result of these benign changes, the horrors of what were once justly regarded as rivals of inquisitory dungeons, is giving way to that confidence, which acts as a moral support and stimulus to those who are devoting their lives to this most exalted, responsible, and honorable work, the care and cure of the unfortunate insane.

Having received a patient, suffering with mania, at an asylum, the question arises: "What shall be done to restore the sick one to his right mind, and to cure all his ailments." The treatment for such a case should be moral, medical, hygienic and dietetic. His confidence must be secured

by the most tender care, and as far as possible his hopes inspired by holding out the prospect of recovery and restoration to his home and friends. To secure the confidence and respect of an insane person the plain truth must be told him at all times and under all circumstances. This is a precept it were well to observe before as after admission to an institution. If the patient makes persistent inquiries as to why he is sent to an asylum, the reply should be that he is sick and needs medical care.

This may displease him, as he is not conscious of being sick, yet the plain truth, told repeatedly, will have a satisfactory effect at last. The insane are granted quick to detect preverications of any sort, and open in their condemnation of the person deceiving them. To tell a person that he is not insane and then inveigle him into an asylum and there retain him, is base treachery, and as such it is long remembered by the victim. The patient may be violent and inclined to tear or break things, no harsh word should ever be spoken to him, even under this provocation. If force must be used to put the person in restraint, let it be abundant, and used with firmness but gentleness. Restraint should always be avoided when it is possible to do so; and it should never be continued longer than necessity and good discipline absolutely demand. The object of restraint should always be protection against harm to himself, or others, and never as a punishment to the patient, the fears of the apprehensive should be quieted by kindly assurances; the fury of the violent may be calmer by appropriate diversion, or by judicious seclusion in a room by themselves for a short time.

For diet, the mania patient needs, and upon this he will subsist, mainly liquid food. I have found beef tea and fresh milk, given every three hours, and in abundant quantities, to be most admirably adapted to the wants of those cases whose restlessness, and preoccupation of mind forbade their partaking of solid food. Frequent and luxurious feeding is a stern necessity in those cases where incessant activity induces an excessive drain upon the system. Of course, where the patient will eat it is well, unless the digestion is faulty, to give him the regular fare of the asylum, with the beef tea and milk as additional nourishment, as the patient grows quiet and tractable, and passes into a state where the appetite and ability to eat are good, the beef tea may be dispensed with and an abundance of vegetables and fruit, with a moderate supply of meat should be furnished.

Except in rare and special cases the use of stimulents in any form is to be deprecated. We have made experiments, upon patients with brandy, whisky, and various varieties of wine, but, except in a very few cases, where the patient was suffering from profound exhaustion, we have observed no beneficial effects. In melancholia stimulents, are more frequently of benefit, yet even here the results are not flattering in the aggregate.

The maniacal patient should be bathed very frequently. Their constant exercise, and their utter disregard for cleanliness require a constant watchfulness, on their behalf, in this direction, a full bath should be given at least twice a week, and, if the patient is very excitable, a sponge bath, over the entire body should be furnished every morning, together with repeated bathing of the face neck and hands during the day. By use of the moist

sponge followed with the dry towel, the comfort of the patient is greatly enhanced. the sour smelling perspiration is removed, the sick man is rendered more calm and cheerful by these grateful attentions,and his recovery,through such apparently simple yet important means, is promoted. The number of remedial agents which experience has proved to be of substantial benefit in the treatment of mania is quite limited. In medicating an insane patient the totality of symptoms, as well as the entire range of complicating conditions is to be carefully considered, and the proper drug selected, accordingly. In the enumeration of remedies, Aconite naturally heads the list. Whoever has read Hempel's nine lectures upon this drug cannot but be impressed with the fact that it is a remedy of immense powers and possibilities. Very few medicines present, in their proving, a more perfect picture of acute mania than Aconite. The only trouble seems to be that its effects upon the human system are too transient to meet the requirements of a weapon that shall smite successfully the whole long continued train of symptoms found in every case of mania. Still Aconite is an invaluable remedy in the early stages of this disease. I have seen a patient who had slept not one whole hour at a time, for a week before admission to the asylum, fall asleep and sleep soundly for six successive hours on the first night after reception,under the influence of two or three doses of Aconite, administered in the third centesimal dilution. Even in the middle stages of this disease, if indicated, it well repays the using. A case where Aconite is called for is recognized by the general appearance, the flushed face, the glistening eyes, the eager haggard countenance, together with a hot, dry skin, a sharp, rapid, wiry pulse, and mentally, intense anguish. There is agonizing apprehensiveness and fear of approaching death. The person screams as if in a great fright; he rushes about wildly, without thought or motive; he clutches everything within his grasp, like a drowning man; he calls for water and gulps it hastily; he tells you that he will surely die. These are the primary somptoms of Aconite. Another train of what might be termed secondary symptoms, and where Aconite is useful, is as follows: The patient after suffering from his malady for some months, instead of being restored, passes into a state where his nerves are all on edge, where the patient is not violent but restless and anxious, where the body is in a tremor, and the mind in a perpetual turmoil of apprehension, and all hope seems utterly lost. The person is quick but weak; and the body emacitated and worn through long unrest. Aconite is here again of service although at this juncture it is quite apt to be overlooked.

Following the lead of Aconite, and almost abreast with each other, march the medical "Old Guard," composed of those therapeutic veterans: Belladonna, Hyosciamus, Stramonium and Veratrum Album. The first of these, Bell., is an invaluable remedy in mania, as might be inferred from the striking symptoms it presents.

The others have their uses, but in a somewhat lesser degree. The Bell. patient is flushed, energetic, indomitable in will and strength. While the Aconite patient is fearful, the Bell. patient is courageous. The latter rides the top wave of insanity with all sail set, and with teeth clenched. His arteries throb with intense fervor; his face glows with the crimson tide that flows beneath; he brooks no restraint and defies all

rule. He is ready and "spoiling for a fight." His pupils are dilated and his eyes glare. All the muscles of the body are tense, and all the powers of mind are summoned to supreme action. The patient is easily roused to fits of rage. He will bite, strike, or kick. He sometimes loses pluck, when he sees imaginary monsters, but regains courage in the presence of visible antagonists. He laughs and cries by spells, but is mostly bold and fierce. Hyosciamus is suitable for a lower grade of maniacal excitement than that which calls for Belladonna.

The Hyos. patient is restless, talkative, obscene, but jolly. He laughs, sings, makes lewd speeches, is inclined to uncover the person and perform lascivious acts. He is inclined to jealousy and has fears of being poisoned, (also Rhus. Tox.) Veratrum alb. is a remedy useful in excessive restlessness with strong tendencies to utter collapse. The Verat. patient is lewd like the Hyos. case, but more inclined to mingle religious sentiment with lasciviousness. He is at times exalted, and again despairs of salvation. He screams and wails excessively, and in turn laughs violently, not the jolly laugh of Hyos., but it is a hideous, ghastly, unmeaning laughter. The Hyos. case more fully maintains his physical strength, while the Veratrum case fails rapidly—has a weak thready pulse, an irregular beating of the heart, a cold clammy skin, with pinched features and blue shrivelled extremities.

Stramonium, according to Dr. Lilienthal, "is the devil's own remedy." The Stram. patient unites some of the characteristics of the three drugs just mentioned. He is even more fierce and vindictive than the Bell. case, has laughing fits like Hyos., or rather like a hyena; and waxes eloquent and pathetic in his despairings of salvation, like the prover of Veratrum. The Stram., case is greatly troubled with illusions, everything appears *dark* before his eyes, he swears at and fights against imaginary foes; he is sexually excited, and strongly inclined to lust. At times the Stram. patient is attacked with paroxysms of intense fear, evidently from the apparitions he beholds, and this symptom sometimes leads to the selection of the drug. Suppression of urine is a frequent accompanying symptom. To the remedies already mentioned may be added Cantharis, Arsenicum, Cannabis Ind., Lachesis, Nux vom., Tarantula, Opium, Rhus. Tox., Baptisia and Veratrum Viride.

The Canth, case is wild and demonstrative in manner, yet sneaking in habit; is morosely silent, or howling and barking like a dog; is shameless, and fierce in lechery. Obstinate ugliness, tearing, scratching, and biting with fury in lust like a wild animal, with frequent attacks of strangury, are characteristic indications for the use of Canth. It has poved itself, when used in proper cases, a useful and powerful remedy.

Cannabis Ind., fills the mind with boundless imaginations, sometimes pleasing, and again those of intense anxiety. The patient fancies each day an eternity, and fears that the end will never come. The slightest labor becomes a burden, because the idea prevails that the task can never be accomplished. The Cannabis patient is often changeable and fantastical.

Despairing of success in one line he turns frequently to some new and more hopeful work. Exaggeration of perception is marked in the Cannabis patient. His own voice sounds like the mutterings of thunder; the striking of a clock seems like the bombardment of a fort; to his exalted

sense all sounds swell to a mighty volume, and every scene reaches out into illimitable space. Cannabis is a remedy that needs great care in application, and is not often truly indicated.

Arsenicum and Lachesis are remedies of considerable value in the treatment of mania; the former where there is general restlessness of all the muscles of the body, with emaciation; and the latter where there is special restlessness of the muscles of the tongue, without emaciation. Both Arsenicum and Lachesis have a marked influence upon the blood, hence they exert a beneficial effect in cases of blood poison tendencies. In the Arsenicum case there is a persistent periodicity of aggravation. Arsen. has restlessness at night which impels the patient to leave his bed and wander about the room. Weakness, emaciation, loss of appetite, and a dry, red tongue with thirst for small quantities and often, are characteristic symptoms. In addition to these the patient experiences sensations of unrest and anguish which often impel to suicide.

The Arsen. patient is quite desirous, at times, to get out of this world and its miseries, while the Acon. patient is afraid he will be obliged to leave before he gets ready.

The Lachesis patient shows a strong tendency to premature decay of both physical and mental powers. It is a useful remedy where there has been an excess of mental work,with malnutrition,and imperfect enervation of the blood. There is not in Lach. so much emaciation as in Arsenicum, but a stronger tendency to *rotting at the core.* Lachesis is loquacious, but weak minded as might be expected. Its range of action, among maniacal patients, is limited, but when indicated it is a master drug in removing some of the most untoward of symptoms.

Nux Vomica is a remedy that is useful in a certain class of cases where the natural tendency of the patient is to ill temper, where the person is of a bilious temperament, has dark eyes and coarse brown or black hair, and whose disposition it is to be sullen, obstinate, and above all suspicious. It is pre-eminently a medicine for ugly, vicious and over worked people.

Rhus Tox., is of service in acute mania where there is a rheumatic history, an excessive restlessness at night,a tendency to typhoid conditions (which conditions and consequent symptoms are familiar to the student of materia medica) coupled with a very strong delusion of being poisoned.

Tarantula is a remedy for "foxy," maniacs. These are full of mischief and prone to sudden fits of destructiveness.

We close the list with two of the "new remedies," but highly important ones in the treatment of mania namely; Baptisia and Veratrum Viride. Baptisia is of service in acute delirious mania, where the patient simulates typhoid, and where the disease runs a rapid and violent course. Offensive and exhausting diarrhœa is frequently present. The tongue is dry and brown through the centre, with a tendency to ulceration upon the edges. A most fetid odor proceeds from the mouth. In mind the patient is wandering and incoherent. Mental action is much impaired, and the brain functions wabble in their courses through utter-weakness. There is often, in imagination a most unique disposition of the body. The patient firmly belives himself dropping to pieces. A leg falls from the bed; one half of him is concealed underneath the mattress; his head

floats away upon a cloud; he is in profound despair and is restless, sleepless and anxious because he cannot "get himself together."

Lastly, but by no means leastly, we come to speak of Veratrum Viride. This is a remedy which possesses remarkable powers in controlling the action of the heart, and in regulating, so to speak, the general circulation. In large doses, that is, doses sufficient to produce proof symptoms, Veratrum Viride causes intense action of the heart and a very rapid pulse. The Veratrum patient is the victim of severe cerebral, congestion, and while in this condition passes into a state of supreme physical unrest. There is constant motion of the limbs, and jactitation of the various muscles of the body. The patient complains of pain in the back of the head, has nausea and retches violently. The face, at first dark red becomes livid or blue as prostration ensues.

Mentally the patient is stupefied, loses his memory, is silent and suspicious, and has fears of being poisoned. He is not very anxious in mind, but terribly restless in body.

XXXIV.

Delusions of the Insane.

BY SELDEN H. TALCOTT, M. D.

Dr. Blandford, in his lucid and eloquent work on "Insanity and its Treatment," says that "a delusion is a false belief in some fact, which, generally speaking, personally concerns the patient, of the falsity of which he cannot be persuaded, either by his own knowledge and experience, by the evidence of his senses, or by the demonstrations and declarations of others. A man thinks his head is made of brass, that he has a fire in his inside, that he is a beggar or a prince; and no amount of proof convinces him to the contrary."

This definition is clear and to the point. Delusions are multitudinous in number, and of the most diverse and opposite characters. They sweep the gamut of demoralized human passion. They fill the cup of their possessor with the gall of intensest sorrow, or they cause it to overflow with perpetual joy. They conjure up the gloomiest forebodings of future ill, or they arch the troubled sky with a rainbow of ecstatic hope. They plunge their victim into deepest hell of despair, or they bear him aloft to some heavenly elysium. Such are the diverse emotions and pathways of those who are given over to the baleful influences of insane delusions. A natural division of delusions may therefore be made under two heads, namely: delusions made manifest by mental exultation; and delusions which conclude their effects by the production of profound mental depression. In either case the cause of delusion rest in some abnormal condition of the brain. The most marked delusions are those of the general paretic, whose tendencies to ideas of grandeur and exhaustless wealth are well known. In these cases there is a chronic inflammation of the meninges of the brain,

with peculiar adhesions of the pia mater to the cortical substance. These adhesions are usually found upon the surface of the anterior and middle lobes of the brain. In mania, when the delusions are remarkably kaleidoscopic in their manifestations, there is usually an inflammatory condition of the blood vessels themselves, which condition, often varying, may account for the marvellous variations of mental action, and the development of Protean hued delusions. In melancholia there is greater fixedness of mental aberration, than in mania; and there is also greater uniformity of pathological change; the usual condition of the brain being that of passive venous congestion, or an exceedingly slow inflammation of the meninges. But we do not propose to discuss in full, in this paper, the pathology of delusions. On the contrary we shall merely attempt to point out the rational and specific homœopathic treatment for patients who are thus afflicted.

To the homœopath these delusions are but symptoms which come to the surface in the course of mental disease. Oftentimes they form the "chief characteristics" whereby we determine both the presence of insanity, and the proper drug which must needs be administered for the speedy and radical cure of the disease in hand. Owing to the vast diversity of delusions it is often a puzzling question, how to deal with them. No *one* remedy begins to cover the erratic and extended array of symptoms classed under the single head of delusions. Indeed we have found the whole materia medica but a meagre armamentarium with which to combat this vagarious and multiple sided foe. But that we might meet the enemy as successfully as possible, we have called out a "Gideon's Band" of delusion producing, hence delusion curing, remedies. This has been done particularly for our own use in every day work, and, as a secondary consideration, for the benefit of our professional brethren engaged in a similar toil.

We present the remedies in alphabetical order, giving delusions produced by each drug, and, in some cases, a few of the closely associated concomitant symptoms. We have found this assortment of peculiar mental symptoms of much service to ourselves in the treatment of the insane; and trust that a presentation of them, *en masse*, to this Society, will not be altogether unprofitable:

Aconite—The patient imagines that some part of his body is deformed, as a limb displaced, lips too thick, or features distorted. He knows nothing and has no conception of anything with his head, but feels that all operations of his mind take place in his stomach. Thinks he is driving sheep, while, in fact, he is lying in bed.

Apis—Has an irresistible desire to run and jump; has a delusive belief that he cannot walk, but is obliged to run or hop. (Also Hellebore.)

Actea Rac—Apprehensions of going crazy; entertains unfounded suspicions of others; depressed, and impelled vaguely to suicide.

Aethusa Cyn—Imagines he sees cats and dogs all around him; (Bell. sees a black dog.) Saw rats run across the room.

Alumina—Consciousness of personal identity confused. When he speaks or sees, thinks another does it for him; or he must be changed into some one else before he can see or speak. Desires to cut his throat, but fears death.

Ambra Gris—Makes grimaces because he feels himself impelled to do so. Distorted images and diabolical faces crowd upon his fancy.

Amphisbæna—Imagines his feet to be in his brain.

Anacardium—Thinks he hears voices of far away friends. Feels that he has two wills; one commanding him to do what the other forbids. Tendency toward suicide by shooting, (also antimonium crudum). Thinks there is a bier in the next room where he or a friend is stretched.

Arsenicum—Thinks friends have offended him, but cannot tell how. Sees an absent friend dead before him. Sees bugs and vermin crawling over his bed; seizes and throws away these bugs by handfuls; Sees thieves in his room, and thinks the house is filled with thieves; tries to hide himself from them; wants to commit suicide by hanging; fears he will have to murder some one.

We find Arsenicum a royal remedy for patients bent upon suicide by any means, providing the physical symptoms of the case coincide with the drug provings.

Asarum—Imagines he is a spirit hovering in the air.

Ant. Crud.—Decided disposition to shoot himself in the night; must leave his bed to rid himself of this unnatural tendency. Continual condition of ideal love and ecstatic longing for some ideal female being, which wholly fills his fancy.

Aurum—Hallucinations of sight; sees a dog; sees a head on the wall, etc. Imagines he is unfit for this world; longs for death, which he contemplates with internal delight; imagines he has lost the affections of his friends.

The belief that "he has lost the affections of his friends," is, we think, the impelling cause which prompts the Aurum patient to commit suicide. The Arsenicum patient, on the contrary, commits suicide on account of his great bodily sufferings.

Baptisia—Body seems scattered; tosses about to get the pieces together; cannot sleep because he thinks he cannot get his body together. Eyes red, pupils dilated, mouth dry, tongue coated, brown and very dry. Thirsty, but two apathetic to ask for a drink. Pulse accelerated and full, or slow and weak.

Baryta Carb.—Great dread of men; imagines she is being laughed at and criticised. Thinks his legs are cut off, and that he is walking on his knees.

Belladonna—Imagines he sees ghosts, hideous faces, and various insects, also monsters; wishes to drown himself; instead of eating, bit the spoon with which he was being fed, and growled and barked like a dog, (also Canth.;) thinks he has suddenly become immensely rich, and owns magnificent mansions; thinks he is a juggler; wishes to run about the streets naked; sees a large black dog, and a gallows before him; is much afraid of both; thinks he is surrounded by dogs; is afraid his living body will putrify; thinks his nose is transparent; thinks he sees a friend's head sticking out of the neck of a bottle; sleeplessness, dry hot head, conjunctiva injected; pulse strong, full, bounding; all movements are hurried and violent; thinks the time has come for her to die; asks those around to die; tries to hang or drown herself.

Berberis Vulgaris—Everything looks twice its natural size. (Platina everything looks small.)

Bromine—Thinks strange persons are looking over her shoulder; everything seems to hop about her.

Calc. Carb.—In delusion talks of fire, rats, mice, and murder, and entertains strange ideas concerning them.

Carbo. Veg.—Desperate; wants to blow his brains out; want of memory; periodic; sudden loss of memory; could not recollect what he had just spoken, or what had just been told him.

Cannabis Ind.—Great exageration of everything; a few seconds seem ages; a few feet an immense distance; a piece of straw seems the trunk of a tree; sudden transition from one fantasia to another; visions of great sublimity are usually succeeded by those of a relaxing and enervating nature; hallucinations innumerable; feels as if top of head had opened and closed; also as if brain were boiling over.

Cantharis—Furious delirium, with paroxysms of rage, with biting, and barking like a dog, (also Bell.); symptoms always aggravated by the sight of water, or anything which glistens, always worse at night. The Canth. patient generally suffers with strangury.

Camphor—Imagines that everything said to him is intended to insult him; thinks his body is so light that, instead of walking, he flies.

Causticum—Full of timorous fancies, with great hopelessness.

Chamomilla—Imagines he hears voices of absent persons; is very irritable; moans, and wrings her hands.

Chelidonium—Thinks she has committed a terrible crime.

Cicuta Vir.—Thinks himself a child again; sings, shouts, dances, plays with toys; confuses the past with the present.

Cina—Sees imaginary things; screams and talks hurriedly; optical illusions in bright colors.

China—On closing eyes sees persons; thinks himself tormented by everybody; suicidal; especially indicated after loss of blood, or other depletion.

Clematis—Apprehensive of some severe misfortune. (See also Magnesia Carb.)

Cocculus—Absorbed in the contemplation of some unpleasant subject; time passes too quickly; hours seem but minutes. (Time too slow, Cannabis Ind.)

Crocus—Thinks she is at a concert and hears beautiful music.

Conium—Thinks he is transformed into a goose, and therefore jumps into the water.

Cuprum Met.—Full of erroneous ideas; thinks he is a great military commander; wishes to beat and tear things to pieces.

Crotalus—Sees death as a black fleshless skeleton; thinks she hears a voice from her left side which she must follow.

Digitalis—Lascivious fancies; great exhaustion; stupid melancholy; rapid and weak, or slow and full pulse; the latter not characteristic.

Euphorbium—Insists upon saying his prayers at the tail of a mule. It is well to explain, with regard to the foregoing symptom, that the victim of Euphorbium in the case was a cart driver; hence it is quite natural that, while suffering with religious frenzy, (an effect of the drug), he

should, besides saying his prayers, pay homage to the animal with whom he daily toiled. History records that this poor man had been brought up under the influence of that famous maxim: "The merciful man is merciful to his beast."

Drosera—Impels to suicide by drowning.

Glonoine—Imagines his chin is too long.

Hellebore—Wishes to drown herself, (also Drosera). Imagines he is obliged to run and jump rather than walk, (also Apis); jumps over hitching posts, and other tall objects.

Hyosciamus—Sees absent persons; thinks he is in the wrong place; visions of being persecuted; lascivious mania, uncovers private parts; fears being poisoned or sold; desires to drown himself, also (Dros. and Hell.); filled with delusions; takes men for hogs; imagines the stove is a tree and tries to climb the pipe; thinks he is picking feathers from birds. The Hyos. patient is usually jolly.

Ignatia—Thinks he has committed some terrible crime, (also Mercurius); imagines she will have an ulcer in her stomach.

Hypericum—Thinks his head has become elongated.

Lachesis—Thinks herself under superhuman control; thinks she is dead, and that preparations are being made for her funeral. Thinks herself pursued by enemies; fears being poisoned, (also Rhus. and Veratrum Viride); suicidal with fear of death, (Alumina, desired to cut his throat, but fears death): characteristic accompaniments are: great loquacity, and extreme sensitiveness to external impressions.

Laurocerasus—Sees old men with long beards and distorted faces in his imagination.

Lycopodium—Thinks he is in two places at once; great despondency but easily angered.

Moschus—Thinks he has no fingers or toes.

Magnesia Carb.—Great fear of some impending calamity. (Also Clematis.)

Mercurius—Thinks he has committed a terrible crime, (also Ignatia); imagines he sees falling water; apprehension of some fearful accident; filthy habits; eats manure; imagines he is enduring the tortures of hell.

Nux. mos.—Fanciful dreamy images constantly appearing.

Nux vom.—Homicidal; exceedingly cross and ugly; suicidal, but afraid to die. The Nux patient talks suicide but seldom commits the act.

Opium—Imagines parts of the body are very large; sees animals and ghosts; feels an increased power which takes him to heaven; imagines he is fencing and will be stabbed.

Petroleum—Thinks another person lies beside him, or that one limb is double.

Phos. Acid—Imagines he see devils; thinks he hears a clock strike, when none is near; sees things above his field of vision pass by his side.

Platina—Thinks all persons are demons; thinks everything about her is *small* and that all persons are inferior to her. (Berberis Vulg. things *look twice their natural size.*

Plumbum—Imagines he hears voices; thinks he is to be shot or poisoned; (Lach. Rhus. and Verat. vir., have fears of being poisoned). Sees frightful things which chase him out of bed.

Psorinum—Labors under the delusion that he will certainly die, when he is in reality, in no danger.

Pulsatilla.—Fancies a naked man is wrapped up in her bed clothes; sees the devil coming to take her; wishes to drown herself; (also Dros. and Hell.); everything seems quiet and she thinks she is alone in the world.

Rhus. Tox.—Fears he will be poisoned, (also Lach. and Verat vir.); knows he will die and wants to drown himself.

Sabadilla—Hallucinations of sight about his own person; thinks his abdomen has fallen in like a dead person's, that his stomach is gone, etc.

Secale—Illusion of sense; the room presented to her the impression of water excessively agitated on its surface; could compare it only to the "foaming of a troubled sea;" raving with an attempt to jump into the water; delirium followed by heavy sleep; excitement followed by depression; has an impression that there were two sick persons in the bed, one of whom recovered, and the other did not; constant moaning, and fear of death; anxious, forgetful, weak minded; great dulness of sense; loss of memory.

Silicea—Sees pins everywhere and dreads them.

Stramonium—Hallucinations which terrify him; sees ghosts; hears voices; sees strangers; imagines animals are jumping out of the ground, and from the ceiling, and are running at him; thinks herself double; or lying crosswise; or that one-half the body is cut off; thinks herself very tall; thinks he will fall into a deep abyss; thinks he was killed, roasted, and is being eaten.

Spongia—Insane desire to sing.

Sulphur—Thinks everything very beautiful and costly; old rags seem to her to be regal finery; is very gay and cheerful; again becomes depressed, melancholy, unhappy without a cause; wishes to die; (fears death, Acon., Lach., Nux vom. and Secale); with depression comes great irritability and ill humor.

Thuja—Fixed ideas; as if a stranger were at her side; as if body and soul were separated; as if he was made of glass; as if a living animal was in his abdomen.

Upas—Lively; again depressed; aversion to speaking; cold toward her friends; repelling every one, evidently from suspicion, and false ideas concerning her friends; morose, and easily exasperated; likes to quarrel; weakening of memory, with marked diminution of muscular strength.

Valeriana—Imagines himself away from home, and beset with dangers; afterwards remarkable liveliness, with great courage; again, hypochondriac, feeling as if objects around him had become estranged; impelled to leave his room, (from the vapor); felt like one who is dreaming, (from the vapor.)

Veratrum Album—Thinks himself distinguished; (thinks himself a commander, Cuprum); squanders his money; has imaginary disease; thinks she is pregnant, or in labor, etc.; pretends he is a prince; imagines he is blind or deaf; says her brain is confused; rubs her head to clear it up.

Veratrum Viride—Puerperal mania; fears being poisoned; restless in body, but apathetic in mind.

Verbascum—Excited fantasias of a sensual nature; distraction of mind; different trains of thought and fantasias throng upon him; diminished memory; likes to have people about him.

Viscum Album—Spectral illusions.

Yucca Filamentosa—Has the "blues;" mind wanders; uses wrong words in writing; uses wrong words in talking.

Zincum—On bending over says his head is so large that he cannot see past it; fanciful illusions; attacks of great loquacity, (also Lach.); mental operations very difficult; difficult to grasp ideas, and to co-ordinate thoughts; loss of thought, and a soporous condition of the mind; great forgetfulness.

In presenting the foregoing array of symptoms, we are aware that we have often passed beyond the strict limit placed upon us by the title of this paper. We have included many symptoms, properly classed as illusions, hallucinations, and even fancies. But these terms are often used indiscriminately, by provers; hence we have included them all in the list.

Hallucinations are false perceptions of the senses, the eye, the ear, the nose, the tongue, the skin being involved, either simply, or in apparent combination with each other. A patient thinks he sees a friend who is a hundred miles away, or he hears the voice of that friend the same distance. His perceptions in these cases are not objective, but subjective, hence unreal and false. An *illusion* is a mistaken perception. The patient sees and hears, but his mind takes cognizance only in a distorted manner. An apple seems the head of a demon; the voice of a friend is mistaken for the thunder of a cannon.

From these false and mistaken perceptions, delusions sometimes grow. Their relationships are so intimate and natural, that they become readily associated in the mind of a prover; are often mingled in the minds of the insane; and whether united or separate and distinct, are amenable to the same forms of moral and medical treatment.

XXXV.

Hystero-Epilepsy.

BY W. M. BUTLER, M. D.

Hysteria, Argus-eyed and Briareus-handed, is constantly spying out and drawing within its own bosom the most multifarious and heterogeneous array of human ills. Like the chameleon, ever changing its form and color, according to its surroundings, it simulates or adopts every disease with which it comes in contact. Volumes have been filled with its symptoms, pharmacopœias have been exhausted in its treatment. A general consideration of this formidable disease is not our present purpose. We simply desire to call your attention to one of its forms most commonly designated hystero-epilepsy.

HISTORY.

The name hystero-epilepsy signifies the close resemblance of this disease to true epilepsy, from which some writers deny the possibility of any exact

differentiation. To the French alienists, M. M. Briquet, Dubois, Dunant, Tissot, and especially M. Charcot, are we chiefly indebted for the clearest and most complete elucidation of this subject. The opinion of M. Charcot based upon his extended experience in la Salpetriere, should carry much weight, in opposition to those, who, with a much more limited experience, deny the existence of the disease. That hysteria and epilepsy may exist, each in its own distinct form in the same individual, all writers admit. Either after years of suffering from that most dreaded enemy, epilepsy, the hydra-headed hysteria appears, and still further blackens the existence of its victim, or after the emotional nature has been shattered by hysteria epilepsy arises and destroys all remaining gleams of intelligence. With all the forms of epilepsy, hysteria may exist in its full development, and run a course entirely independent of its associate disease. Of hysteria and epilepsy associated, but each distinct in its paroxysm we do not intend to treat. The form at present under consideration is that in which the hysterical and epileptic symptoms of the disease are from the first inseparably blended. The hysteria appears with convulsive features, so intensified as to closely simulate true epilepsy, and yet possessing distinctive characteristics, capable of recognition. Although rarely found in this country, yet the fact of its being seen in many foreign hospitals, and mentioned by many alienists in other countries, renders it highly probable that cases may sometimes exist here, improperly classified as epilepsy. Having had the opportunity of seeing several of these cases in la Salpetriere, we have thought the presentation of a short history of this disease, with its diagnostic symptoms might be of interest to this Society. The class of persons afflicted is that in which ordinary hysteria most commonly abounds; such as highly-emotional-romantic-hyper-sensitive girls and women, with illy balanced minds, often with brains containing undeveloped germs of insanity implanted by an insane ancestry, and with education defective or entirely neglected. Combined with this peculiar mental bent, we usually find a generally weakened organism, and always an irritability of one or both ovaries, the left being most often affected. From excessive sexual indulgence, entire abstinence, or some other cause, hypersensitiveness of the ovary arises acting as a reflex centre for the disease.

SYMPTOMS.

The epileptic phase usually opens the scene, as if to warn the victim, the approaching enemy sends forerunners in the form of hysteric aura. These occupying for a considerable time the abdomen and epigastrium, allow the patient opportunity to prepare for the dreaded ordeal through which she is to pass. As if alarmed at the enemy's approach, the patient utters a cry, turns deathly pale, and deprived of consciousness, falls. Then as if contending against a legion of devils, the body passes through the most fearful struggle. The face highly tumefied and purple, with features frightfully distorted, and lips and mouth covered with foam, or tinged with blood from the bitten tongue, pictures the dreadful conflict within. Together with the facial distortion, a tonic rigidity seizes for a time upon all the limbs, accompanied by short oscillations mostly limited to one side. Then, suddenly, as if released from this mighty demonic power, the muscles become relaxed and the patient sinks into a coma, and, lying with stertorous respiration, testifies to the strength of the power with which

she has been contending. To this stage the clonic phase succeeds in which the hysteric character of the disease is clearly manifested. Intentional muscular movements with varied contortions expressive of joy, fear or hatred, testify to the stories of passions by which the whole emotional nature is shaken. At least the pent up passions thus far held in partial check reflecting themselves upon the brain, burst forth in the wildest delirium. Now do we fully realize that whatever there is of terrible, whatever there is of beautiful in the heart of man, all that shakes the soul to and fro, and is remembered while thought and flesh cling together—all these have their origin in the passions. As it is only in storms and when their water's are driven up into the air, that we suddenly catch a glimpse of the depths of the ocean; so it is only in the season of perturbation that we obtain a passing glance at the real internal nature of man. It is then only that the wonderful might of their eruptions, shaking like a reed his mortal frame dissipates all regard of the world's opinion and rends in pieces the cobweb veil, with which prudence, or the cold calculations of selfish interests, hides the feelings of the heart. It is then only that nature speaks her genuine feelings; and as the last night of Troy, when Venus illumined the darkness, and Aeneas saw the gods themselves at work, so may we, when the blaze of passion is flung upon man's nature, mark in him the signs of celestial origin, but tremble at the demons of darkness by which he is controlled. In this stage every phase of sensual delight is passed through. The face beams with smiles of enjoyment and gratification. At one instant the erotic impulses are aroused and in the imagined arms of her lover she pours forth cooing words of love, then with her whole nature raised to its highest pitch of excitement, she experiences the intensest thrills of a sexual orgasm. Filled with the most enjoyable hallucinations of the senses, she wanders in an elysian land of voluptuousness, gardens of beautiful flowers of every conceivable variety of color, filling the air with exquisite perfumes are spread out before her, while she listens to strains of music more enrapturing than sweetest notes of nightingale. With all the senses sated she lingers in an atmosphere of ecstasy, equalled only by the brightest visions of the hashish dream. Suddenly the scene changes; smiles are dissolved in tears, and the facial expression of enjoyment is transformed into that of most abject fear and horror. In an instant she is plunged into an abyss of woe more terrible than any viewed by Dante in his tour of the Inferno:

> Around her every frightful shape appears,
> * * * "hellish furies stained with blood;
> In limb and motion, feminine they seemed,
> Around them greenest hydras twisting rolled
> Their volumes; adders and cerastes crept
> Instead of hair, and their fierce temples bound,"

and with violent sobs and tears she passes again into the sphere of consciousness. The trying ordeal is passed, the present attack ended, but to be renewed again at longer or shorter intervals, although not always in the same exact order or with an equal degree of intensity.

DIAGNOSIS.

Having outlined this disease as a whole, let us see wherein it differs

from true epilepsy. In the first place it may be observed that the epileptic type never appears in a complete form, and occurs only in connection with the grand mal. never with the petit mal., or the vertigo epileptique. A second characteristic point is, that compression of the ovary always modifies, and at times arrests the attacks, which is never the case in true epilepsy. A third essential point is the lessened effect produced upon the intellect. Patients, although suffering for years from this disease, retain their original amount of intelligence, in marked contra-distinction of the dementia produced by long continued epilepsy. A fourth highly characteristic feature is the difference in temperature produced by a long series of attacks in the two diseases. In hystero-epilepsy that patient may under go in a short time an almost innumerable number of consecutive convulsions without raising the temperature above 38° or 38.5°′ C., while in the Grand Mal. with a like series of convulsions the thermometer rises much higher, although some days may intervene between the series. In hystero-epilepsy, moreover, attended by a great number of paroxysms within a short space of time, there is much less danger of a fatal termination than would be the case in Epilepsy. One case cited by M. Charcot has been known to have as many as two hundred paroxysms in twenty-four hours with no increase in the temperature and without imperiling life.

CAUSES.

The causes most active in the production of ordinary hysteria, are also influential in developing hystero-epilepsy. Among these may be named, lack of employment, faulty education, with deficient nourishment and improper hygienic surroundings, ; in fact any agency tending to lower the system and diminish the general vitality. A prominent cause is also found in the insane neurosis produced by hereditary taint. In addition to these general causes we always find another essential cause in the diseased condition of the genital organs, and especially of the ovaries.

PATHOLOGY.

The few post-mortems of this disease thus far obtained, have failed to demonstrate any reliable pathological change. The invariable effect produced by compression of the ovaries, renders it highly probable that these organs act as reflex centres of the cerebral and spinal symptoms, although as yet no definite universal lesion has been discovered in them. Germs of this disease are, also without doubt, in the depraved and impoverished blood as in ordinary hysteria, but more extensive research is necessary for the complete establishment of these suppositions.

PROGNOSIS.

The prognosis as regards cure is invariably unfavorable, although the disease may exist many years without producing death. One case mentioned by M. Charcot has suffered forty years from the severest form of this disease, without visibly impairing the intellect, and at last accounts was still living.

TREATMENT.

Cases of this disease having been almost exclusively under allopathic care, no specific homœopathic treatment has yet been established. Chief attention evidently should be paid to the elevation of the patient's lowered

vitality by suitable hygienic measures, the strengthening of self-control by appropriate regular discipline, together with the application of remedies having especial action upon the uterus and ovaries. Although hystero-epilepsy does not present a promising field for curative treatment to any school of medicine, yet it is worthy of our ablest efforts, as in the language of the founder of the Inductive Philosophy: "In seeking for brilliant impossibilities, useful realities have often been discovered."

XXXVI.

Circular Mania--Also Called Folie Circulaire and Folie a Double Forme.

By W. M. Butler, M. D.

No two forms of disease could be more diametrically opposed than mania and melancholia. The nervous erethism of mania would seem to bear no relationship to the bodily languor and mental inactivity of melancholia, yet in circular mania we find mania and melancholia united as component factors of one dire mental disorder.

History.

For its discovery we are indebted to our French neighbors, the honor of its first description having been claimed by Dr. Baillarger and M. Falvet, the former designating it "Folie Circulaire" the latter "Folie a Double Forme."

Symptoms.

The disease presents in its course a fully developed manifestation of mania and melancholia, the one regularly succeeding the other and both being as essential to the whole as are the different stages of intermittent fever. Between the two, or succeeding their manifestation, may, or may not, appear an interval of sanity, different cases varying as to its duration, appearance or non-appearance. For a proper understanding of the whole let us consider its integral parts.

Mania.

The first noticeable change may be a simple exaggeration of individual characteristics. Restless, sleepless, talkative and uneasy, a desire is manifested for engaging in numerous pursuits, of an utterly impracticable character, all of which present to the individual glowing prospects. No obstacles appear too great to be surmounted. Filled with conceit he talks loudly and constantly of his plans and his own ability. Exceedingly irritable and deaf to reason the least opposition will cause him to shower down upon friend and foe alike torrents of abuse or provoke an outburst of violence, yet for these manifestations numerous excuses are always ready, completely exculpating him from all blame. In a state of general erethism the unbridled passions often plunge the victim into every form of excess. Especially liable to inebriation, the mental disorder is frequently

overlooked and all abnormal conduct is ascribed to drunkenness, this being a favorite excuse with the patients themselves for their frequent breaches of propriety. Most consummate liars, cunning, tricky and yet free from delusions and capable of temporary self-control, one patient, in this stage of the disease is capable of disturbing the peace of a whole community, yet a physician at an examination may fail to find enough evidences of insanity to warrent a certificate. Within an asylum they become sources of the greatest annoyance and trouble. Possessed of an abundant vocabulary they fill the ears of all about them with the torrents of abuse which they pour upon the heads of their friends and the asylum officials for their unjust detention.

Restless and filled with pent up energy they are continually busy, but incapable of accomplishing anything of importance by their labors. When not busied with their hands, their active brains are engaged in concocting plans of mischief which they instill into the minds of other patients and then cunningly watch the results. Aside from the sleeplessness and the wild congested appearance of the eye, scarcely any physical symptoms may be discernible. Denying the existence of any bodily ailments, the patients insist upon their perfect health of body and mind, and their ability to engage in their ordinary pursuits in the outside world. For weeks, or months, even this mental condition may prevail, until by degrees, or by a sudden transformation, the patient is plunged from his state of exhileration and buoyancy into the depths of melancholia.

MELANCHOLIA.

All the bright hopes and dreams vanish, and the darkness of mental night and despair settles down upon him. Dull and listless, the mind, refusing to obey the mandates of the will, becomes utterly incapable of concentration upon any subject. With all the springs of vitality apparently run dry, the bodily functions retarded and obstructed, any activity of body or mind seems an impossibility. The least exertion becomes a task, and convinced of his utter incapacity, the patient takes to his bed refusing to put forth the least exertion. Here, day after day, half dead and alive, he lies in a state of semi-torpor of body and mind. The coated tongue, foul breath, perverted taste, constipated bowels, weakened pulse, and generally impaired circulation, testify to the extent of sympathy between the body and mind. Clouded by the blackest despair, with the mind filled by delusions of poison, and an apprehension of impending calamities, continually dwelling upon his own utter baseness and the interminability of his present misery, thoughts of suicide arise, too often culminating in successful attemps unless thwarted by constant care and watching. Lying for weeks in this condition utterly refusing food, or taking it in inadequate quantities, unless particular attention is exerted the patient may die of starvation.

After having passed through this phase of the disease, the patient may emerge from the gloom as suddenly as he descended into its depths, to commence again the round of excitement and activity, displaying almost the identical symptoms in the same order which characterized its predecessor.

In some cases these two stages, succeeding each other in regular rotation, constitute the whole of the disease. In other cases a stage of con-

valescence ensues, either between the two stages or after their development. The patient now apparently freed from all "old shapes of foul disease," with joy returns to life again, with all its busy cares, but to find too soon his hopes of health restored "fickle as a changeful dream." In a few months, or, at most, a year or two, the the sleeping demon of his brain, again aroused, bursts forth with redoubled fury, and mercilessly drives its victim up and down the beaten track of the same old mental tread mill.

In fully developed cases, the periodicity may be so well established that the physician can foretell the number of days in which the patient will remain in each succeeding stage, and even the peculiar delusions which will be developed in different individuals. The majority of cases, however, are not thus perfectly developed and will only present the cardinal factors of the disease, the successive attacks of mania and melancholia.

DIAGNOSIS.

The disease with which this is most likely to be confounded is recurrent mania, but recurrent mania lacks the stage of melancholia, the patients, in the intervals between the attacks, being often perfectly rational and showing no signs of insanity.

The conduct of the patients during the excited stage might suggest the premonitory symptoms of general paresis, but the absence of the numerous physical symptoms characteristic of paresis would prevent any danger of confounding the two.

CAUSES.

The cause is almost invariably found in heredity, or a predisposition to insanity, revealed in the numerous evidences of the insane diathesis appearing in the family.

PROGNOSIS.

The prognosis as regards permanent recovery is invariably bad. Although lengthened convalescences may occur, permitting the patient to engage for a time in his accustomed occupation, soundness of mind cannot be expected. When once the cycle of this disease is established, those caught within its eddies are as irrevocably doomed as if engulfed in the fatal vortex of the Stygian pool. As the majority of the cases of circular mania remain in their homes, it becomes a matter of interest to determine what degree of responsibility should be accorded to their actions, when suffering from the disease. Even when in the convalescent stage they lack the mental poise belonging to sound minds and when excited or depressed are certainly in a great measure unaccountable, although they may know the exact nature of right and wrong. As cases of this kind are frequently brought into the courts for crimes and misdemeanors, it is important that every physician in general practice should be familiar with the nature of the disease.

TREATMENT.

The treatment of this disease has thus far proved exceedingly unsatisfactory. While numerous remedies, like Bell., Hyos., Nux vom., Plat., Stram., Tarantula and Verat Vir., have modified the symptoms of the mania, and Ars., Cimicifuga, China, Ign., Nat., Mur., Phos. Acid, and Sepia may relieve those arising during the stage of melancholia, none has

yet been found capable of effecting a positively permanent cure of the disease. Especial care is necessary, during the period of depression, to be given to the administration of nourishment, as the patients if left to themselves will seldom take enough to sustain their strength and often from the condition of their appetite and digestive organs, and through the influence of dilusions refuse it entirely. In such cases liquid food should be injected by means of Davidson's syringe through a nasal catheter.

The patients are usually as well off in bed, during this period, as they often stubbornly refuse to exert themselves and all attempts at engaging their minds, by occupation, are utterly futile.

The following case formerly under our treatment in the State Hom. Asylum, is typical of the disease.

CASE.

Mrs. C. P. H., widow, aged fifty-nine, mother of nine children, native of Glasgow, Scotland. Admitted Feb. 19, 1876, with the following history:

May, 1864, became much depressed mentally, alternating at intervals of three to five weeks with buoyancy of spirits and has so continued until the present, the attacks gradually increasing in severity. During the stage of depression the patient constantly keeps her bed, apparently too weak to arise, until the excited period arrives, when without any premonitory symptoms she suddenly arises from the bed, manifesting her normal activity, which gradually changes into great excitement. During the excited intervals she sleeps little, talks and writes a great deal, and is constantly desirous of change.

Feb. 21st—Has sleep about six hours during the past two nights. Complains of some tenderness over spine. Says any excitement or emotional trouble upsets her. Talks rationally but incessantly, and in a rapid excited manner. Inclined to wander uneasily about her room at night. March 15th—Did not get up this morning as she thinks she is not well enough to arise. Has lost her bright cheerful look. Says she feels like being alone and not talking. Cannot fix her mind so as to write, yet can read. Has no appetite, complains of a cottony taste of mouth, tongue mapped.

During the next three years the patient continued to present a repetition of the same symptoms, with never failing periodicity remaining in bed five weeks, and being up four weeks, the symptoms of each period reappearing in almost exactly the same order each time. As the disease progressed it seemed to increase in severity, the patient becomming more and more unmanageable during the excitement, and during depression revealing signs of increasing weakness and loss of vitality. During warm weather the disease appeared somewhat modified, but to again evince an increased severity with the returning cold. After three years of treatment, the patient was discharged May 15, 1879, unimproved.

The majority of cases do not present the disease as fully developed with such unerring regularity of recurrence in the stages. In some cases the disease is only manifested in the autumn or spring or once a year, or even once in two or three years, but in every case the characteristic succession of excitement and depression reveals the true nature of the disease.

XXXVII.

The Relations of Occupation to Insanity.

BY W. M. BUTLER, M. D.

Insanity has become a subject of interest to every thoughtful mind. Limited to no rank or station in life, it is justly regarded the most dreaded scourge of humanity. With millions already invested in hospitals for its treatment, the people are continually called upon, through their legislators, for renewed contributions to meet its increasing demands.

Long since removed from the realms of the supernatural, and shown to depend upon a diseased brain, it has, for years, received the most careful study and diligent attention. Much has been discovered, yet still the disease prevails and multitudes yearly fall its victims. In view of these facts it becomes us to study, in the closest manner, the disease in all its bearings and endeavor to discover every check to its future progress.

It will be the object of this paper to briefly consider the effect of different occupations upon the production of insanity, and the reasons for the relations which may be found to exist.

Any conclusions as to the relations of occupation, both mental and manual, to insanity must necessarily be approximative, from the imperfect statistics upon the subject and the numerous predisposing causes independent of vocation. No trade or profession is exempt, all alike, both those who work with their brains and those who labor with their hands, are numbered among its victims.

To be more definite we shall consider, first, the relative frequency of insanity among professional workers and the laboring classes. Secondly, the causes chiefly instrumental among each. Thirdly, some preventives.

Of twelve thousand four hundred and forty-five, cases, recorded in the reports of different asylums in this State, we find three hundred and eighty-four, or a little over three per cent., belonging to the professions, as lawyers, doctors, clergymen, teachers, editors, artists or authors. At first thought it would seem that, with ninety-seven per cent. of the inmates of our asylums belonging to their ranks, the followers of the manual pursuits were in greater danger of insanity than their professional brethren. A study of the census reports of New York State, for 1875, demonstrates the falsity of this conclusion, as we find that less than two per cent. of the entire population, above twenty-one years of age, are engaged in the professions named, and less than one per cent. of the aggregate population.

For this indisputable predominance of insanity among the professions are there any assignable causes? Are there any reasons why the brain workers in our State should furnish so large a quota of our insane? We think there are many causes, a few of which we will notice.

In each of the professions of law, medicine and theology peculiar dangers exist, rendering its members liable to insanity, yet we find from each about an equal number in our asylums. Among the twelve thousand cases studied, we find from the law, sixty-two one hundredths of one per

cent., from medicine fifty-seven one hundredths of one per cent., and from theology forty-nine one hundredths of one per cent. From the census reports of 1875 we find the percentage of representatives from each of these professions in the State still more nearly equal, viz.: clergymen thirteen one hundredths of one per cent. of the entire population, and lawyers and doctors each fifteen one hundredths of one per cent. Hence it is apparent that the causes, tending to the production of the disease, are about equal in each of the professions.

Of the causes, equally potent in each, we would mention as pre-eminent, the improper development and strengthening of the brain, by suitable preparatory training, before the life work is begun. From the slight barriers to their entrance we find all the professions filled with numbers who have entered upon their work with the slightest possible preparation. Grown up to manhood and accustomed only to manual labor upon the farm or in the workshop, numbers of young men conceive the idea of seeking a higher vocation in one of the professions. With brains wholly unused to continued mental activity, they enter upon their professional studies. After two, or at most three years, of blind groping among the mysteries of law, medicine or theology, they are enrolled in one of the professions. What is the result? Their minds, undeveloped and lacking the power and elasticity acquired only by long, careful, systematic training of all the mental faculties, are incapable of performing the perplexing duties so unwisely assumed. Is it any wonder that their brains, from this constant, excessive burden, give way, that reason totters and like untrained racers, they fall before the course is half finished? The only marvel is that so many remain in reason's realm.

Another cause, alike applicable to all the professions, is the constant drain upon the brain with insufficient rest and recreation.

Not content with devoting the day to his most perplexing duties the professional man too often labors far into the night, and then, when the much needed rest is sought, his brain stimulated and excited either resists the spells of sleep, or continues to revolve the same subjects in his dreams. Thus continuing day after day, and year after year, the brain, at last, becomes exhausted and the mind wanders off into the wildest delusions of fantasy, or sinks into the cimmerian darkness of dementia.

Not the least pernicious and uncommon cause of insanity in the professions, is the unsuccessfulness of many who enter their ranks.

Free to all, their numerous prizes induce many to enter the professions who from their natural abilities are entirely unadapted to the work attempted. Confronted continually by obstacles, which they cannot overcome, their efforts become a series of disappointments. Ever striving for honors, just beyond their reach, the bright successes of those around them throw into still deeper gloom their own failures. At last, discouraged and disheartened, all hope leaves them and they fall into the ranks of that ever increasing army of minds dethroned.

Another frequent cause of insanity, especially among lawyers and doctors, is the excessive indulgence in intoxicating drinks.

Over worked in body and mind the need of temporary stimulus is felt, and the indulgence, at first, only allowed for some extra effort, soon becomes a habit, hurrying the unfortunate into insanity.

Another source of danger among lawyers and clergymen arises from their inattention to outdoor exercise.

Many of our most eminent members of these professions, utterly disregarding this necessity, have from the tortures of a chronic dyspepsia reflected upon their brains been transformed into tedious hypochrondriacs or hopeless melancholics.

In addition to the general causes mentioned, we find the physician especially endangered by the general irregularity of his life, and far too frequently exhausted by constant exposure and fatigue. With lack of rest and sleep, worn out in body and mind, he becomes a hopeless lunatic.

Next to the professions we find the class most productive of insanity to be the farmers.

With but five per cent. of the general population we find eighteen per cent. of the inmates of our asylums are farmers, while the next most fruitful source of insanity, the laborers with an equal per cent. of the inhabitants of the State, only number eight per cent.

This estimate, made upon the inmates of our city as well as rural asylums, while not absolutely correct; can be considered as essentially reliable.

What reasons can be assigned for the great prevalency of this disease in this occupation usually considered as the most healthful?

Without going into detail we will simply mention as a few of the most powerful causes at work among this class:

First—The constant worry and anxiety of the farmer, caused by the fickleness of the seasons and the uncertainty of his crops.

Second—Constant exposure to the intense heat of summer and severe cold of winter.

Third—Frequent drinking of large quantities of cold water when overheated.

Fourth—Improper diet with rapid eating, and inattention to the necessities of digestion.

Fifth—Excessive bodily exertion for too many hours, with insufficient rest and sleep.

Sixth—Constant turning of the mind in one direction, with too much solitude and too little mental diversion.

This list of dangers, some of them comparatively unimportant in themselves, form an aggregate sufficiently formidable to produce all the mental wrecks so frequently encountered.

With this consideration of the dark pitfalls in which so many have been ruined, let us consider some preventives which may keep others from meeting a similar fate.

PREVENTIVES.

The name American has become synonymous with rush, bustle, push. Our national need is greater moderation and less haste to get rich. Our people should have less work and more play, a greater number of holidays and more amusements suited to the needs of each class.

Every professional man should have some hobby, outside of his profession. Let him cultivate flowers, raise Jerseys and Alderneys, paint, practice music, geologize, do something suited to his tastes, which will take his mind out of the rut of his business routine. Let the lawyer and minister ride horseback, row, box, or practice in a gymnasium, and by developing

their muscles and stimulating their digestive organs bid defiance to that most pernicious enemy, dyspepsia.

The needs of the farmer are no less imperative. Let him by making himself acquainted with the necessities of his body avoid the dangers incident to his daily toil. By useful reading, and as far as possible by lectures, concerts and general amusements, he should surround himself by a world not limited by his boundary fences. Let him fill his mind with the thoughts and ideas of great men and the world outside, and his own little cares and anxieties will contract and diminish, and his mind less frequently sink into the realms of despair, or become filled by the frightful ghosts and illusive spectres of mania.

If our people, remembering the efficacy of the ounce of prevention, would strive more urgently to properly develop and preserve their minds, when in health, there would soon be no need of new asylums and few inmates in those already constructed.

XXXVIII.

Post Mortem Examinations of the Insane.

By N. EMMONS PAINE, M. D., Assistant Physician New York State Homœopathic Asylum for the Insane

As there has been treated a small number of patients in this asylum, compared with other State institutions, so there have not been many deaths. But whenever a death has occurred, it has been customary to hold a post mortem examination, if the relatives consented. Up to this time, there have been twenty-eight examinations, of which I have made, or assisted in making, twenty-seven. In this paper, I shall give a brief history of each of these cases, both as developed before entering the asylum and while residing here, and then the result of the examination made after death. No attempt will be made to carry the investigation beyond the dissecting table and the unassisted eye. No minute or microscopic appearance will be given, nothing more than would be evident to any physician. At the close, attention will be drawn to a few facts observed in these cases.

CASE 1.

M. B. de P., No. 88; admitted March 30, 1875; male, age 80; carpenter; diagnosis, senile dementia, but in condition of acute mania; first attack; duration, a few days.

After admission, for about four weeks, he was very noisy and violent, and was sleepless, with delusions of poisoned food. He then improved, and went about the grounds alone; but was obstinate and often untruthful from forgetfulness. In February 1878, he suffered from a severe bronchitis, which was renewed on May 11th. He then became weaker,

and was troubled with vertigo and falling. May 25th he was much worse, and was kept in bed; and chills began returning every second day. The tongue deviated to the left. He became weaker gradually, but was rational most of the time until his death, May 25th, 1878.

POST MORTEM EXAMINATION.

Twenty-two hours after death. Body well nourished. Dura mater strongly adherent in left frontal region, under an old scalp wound, sub-arachnoid space filled with serum. The whole amount of serum was six ounces. The vessels over the convexity were filled with blood. There were some reddish patches of discolored serum under the arachnoid, and in the parietal region of both sides, but mostly of the right, was a yellowish color upon the convolutions. Brain weight 48⅛ oz. It was consistent. At the base, the vertebral, basilar, carotids, circle of Willis, and the three cerebral arteries were calcified. The white substance appeared natural on section. Both lateral ventricles were filled with serum. The vena corporis striati of each ventricle, was calcified, and the choroid plexus felt gritty. Upon opening the thorax and abdomen, the adipose tissue was about one inch in thickness. The lungs contained near the apexes about half a dozen hard, calcareous nodules, varying in size from a pea to a pigeon's egg. The lungs were of dark color and filled with blood. In the heart under the mitral valve, was a rough, calcified lump, size of a kernel of corn. The kidneys were small, with some calcific deposit in the renal artery. The spleen was of natural size.

CASE 2.

J. S., No. 186; admitted Jan. 17, 1876; male, age 58; bookkeeper; diagnosis, dementia, first attack, of three weeks duration; has been an excessive liquor drinker.

When admitted was very weak, with acnee rosacea of nose and cheeks, with areus senilis, and was very dull. He gradually gained strength, and in February could answer questions quite rationally. He was subject to attacks of dizziness, and always cried easily. He stood much of the time unless prevented. In September his mind was still weaker, he seldom spoke, but had some pain in temporal region.

In March, 1877, more stupid, and continually undressing himself.

In July there were frequent regurgitations into the mouth of partially digested food, without nausea. The feet and ankles became œdematous. When standing, he was so rigid that assistance had to be rendered to enable him to bend and seat himself.

Nov. dizzy and falling, and spent much of time abed. By Jan. 1878, he had become much weaker, the regurgitations continuing, until he died January 25th, 1878.

POST MORTEM EXAMINATION.

Ten hours after death. Body emaciated. Dura mater adherent to calvarium in anteror portion. Sub-arachnoid space contains much serum, the whole amount being five ounces. Some opacity of arachnoid. Convolutions appeared whiter than natural, and very broad, the sulci not being of usual depth. Not quite natural consistence. Brain weight

forty-three ounces. Both lungs adherent, especially the left. Tubercular deposit in both lungs. Liver was eight by six inches, pale and yellowish. Spleen three by two inches.

CASE 3.

J. D., No. 219; admitted May 4, 1876; male, aged 68; gardener; diagnosis, senile dementia; first attack, duration, three years. His insanity was first shown by delusions, that the shrubs about his house had caused a soreness of his eyes, and by his wandering about the country. For two days, at that time, he did not know his own name.

When admitted, was very forgetful, knew but little, and was often irritable and destructive of clothing. In August he fell from the chair, in which he was sitting. In March, 1877, for an hour or two, he was unconscious and motionless, with his eyes open.

Later, by May, he was more demented, and could scarcely recognize his son; while, at the same time, his eye sight was failing rapidly, and he could scarcely see anything. From this time, he had a constant habit of working his thumb nails together, keeping them worn to the quick; also, very frequently undressing himself, and grating his teeth very loudly. He wet his bed every night; and his bed had high sides to prevent him rolling out upon the floor. In August he became excited and violent for about twenty-four hours. He was generally much constipated. The saliva drooled from his mouth, while sitting or walking, during the day. Nov. 19th, he fell from his chair, and was comatose for three hours; then he could move about again. In June, 1878, he became excited one morning, and fell from his chair, fracturing the left femur. He was then kept in bed, although it was impossible to keep him quiet, where he gained slowly for a few weeks, but died Nov. 6th, 1878.

POST MORTEM EXAMINATION.

Twenty hours after death. Body fairly well nourished. Dura mater not adherent. Sub-arachnoid space filled with clear serum, tinged red in some places. Serum amounted to ten ounces. Arachnoid somewhat opaque. The convolutions were separated unnaturally. Weight of brain thirty-seven and a half ounces. It was not consistent, but was not soft; and impression of the fingers was retained a long time. The color was pale, anæmic, almost white. The carotids and vertebral arteries gaped, after cutting, and were hard like goosequills. The ventricles contained much clear serum.

Adipose tissue on thorax and abdomen, moderate. The lungs appeared quite natural, they were not adherent; and there was no fluid in thoracic cavity. The heart weighed nine and a half ounces; the walls were not hard to tear, and its valves appeared normal. There was no atheroma of aorta. The diaphragm was easily torn. The kidneys weighed four and a half ounces each. One contained some small calculi. The spleen weighed three ounces, and looked healthy. The liver weighed thirty-eight ounces. It did not appear diseased. The bladder was easily torn.

CASE 4.

H. K. No. 258; admitted Sept. 16th, 1876; female; aged 45; diagnosis, cerebral tumor, first attack "of five weeks duration" as reported

by her friends; but it was probably longer; as for two years she had grieved excessively over the death of her daughter.—[The notes of this case are taken from the record of Dr. A. P. Williamson, with his consent.]

When admitted she was wild and had delusions. She talked incoherently, and in Irish brogue, so that it was impossible to understand her. As she was violent and destructive she required restraint until December. During the winter she improved, growing stronger and more rational. In February, 1877, she complained of pain in the front of her head. She also suffered from frequent nausea and vomiting; while a lack of co-ordination began to be shown in walking. Some days would pass without the vomiting. In April an excessive salivation appeared. The salivation continued during May, with frontal headache and constipation. It was now learned that she had suffered with the dull frontal headache for about a year; also with an occasional occipital pain, which forced her to throw her head suddenly backward. This pain was increased by excitement, and was accompanied by vertigo, so that she was unable to stand or walk alone. At the last of the month she was bent over to the right side. There was then strabismus and amaurosis of the left eye, with complete atrophy of the disc. There was but little sight remaining in the right eye; and that was in the outer and lower portion. There was also marked right facial paralysis. She could not hold the saliva. Her words were indistinct, partly from disturbed laryngeal action. The hearing in left ear was much impared, but the right ear was normal. The extremities were cold. Complexion ashy. Later, œdema was present, under the eyes, for a few days. On May 31st she could not swallow, from paralysis of the œsophageal muscles. On June 1st the paralysis extended rapidly; sight was entirely gone; both conjunctivæ being chemosed. She muttered constantly. On June 2nd she died.

POST MORTEM EXAMINATION.

Twelve hours after death. No rigor mortis. Very little adipose tissue. Decomposition progressing rapidly. There was a great increase of subarachnoid fluid, probably about five ounces. The brain appeared natural. The convolutions were large. The sulci were deep. The brain weighed forty-nine and a half ounces. When the base of the brain was exposed a tumor was discovered, egg-shaped, pressing upon the left side of the pons varolii. It was fibro-cystic, one and seven-eighths inches long, one and five-eighths wide, in its widest part, and one and three-eighths inches in depth. Externally it was bound by the cerebrum; internally by the pons varolii and medulla oblongata; anteriorly by cerebrum and pons; posteriorly by cerebellum. A depression had been made by its pressure in the pons varolii, the medulla, the cerebrum and cerebellum. The tumor was pedunculated, the connection being about the size of a knitting needle, and half an inch long. It was attached to the cerebellum. It consisted of two serous cysts and some solid material that resembled the gray brain matter. The tumor was not free to turn upon its peduncle, as two or three small vessels ran from one side into the pons varolii and medulla. The lungs, heart and liver appeared normal, but in the left kidney there was a grayish

and granular appearance of the membrane of the pelvis, with a small amount of purulent fluid.

CASE 5.

D. P. No. 293; admitted January 9th, 1877; male; age 61; book-keeper; diagnosis, general paresis, first attack, of about six weeks duration.

While attempting to direct some letters, about six weeks before admission, he found himself unable to do so. For a time he was bewildered. At night he would start up to attend to some business. He thought that boys were entering the windows. His voice was huskier than usual. It was said that he had had a sun stroke in the past summer. He had been a first-class book-keeper, but had lately been out of his usual employment. After admission he was very forgetful; he thought himself still at home. For a fortnight his pulse was weak, from 90 to 110. He then became stronger, pulse 80. He thought that he visited the asylum during the day, but slept at home at night. He was changeable in disposition, being sometimes very pleasant, but at other times quarrelsome, violent and destructive. The pupils appeared normal, and the tongue was protruded without tremulousness or deviation. At the end of two months there was occasionally a spasm of the muscles of the mouth when speaking. During the third month there was a partial paralysis of the left arm and face, lasting for nine days, with daily clonic convulsions in those parts, but sometimes attacking the whole body and lasting but a few seconds only. Soon afterward the first appearance of tremulousness was indicated by the bending of his arm at the elbow. On May 24th, at 5 o'clock A. M., he fell upon the floor unconscious. After being put in bed, he soon could answer questions.

The next day he had severe pain in the left arm and leg. His speech was thick. He was continually measuring the blankets. The following symptoms continued a week, to the end of the month: Convulsive seizures of either or both sides of the body; paralysis, lasting a few hours, of one side of the body, with constant twitchings of the other side. He was always pleasant and happy. He had no memory of recent events, but slight memory of old occurrences. His pulse ran from 100 to 130. On June 1st he was drowsier. There were almost constant twitchings of the left leg and right arm, but less frequently did they occur in other parts of the body. He now appeared, in speech, a marked case of aphasia, as whenever he spoke he used the same expression, "How are you?" The epileptiform convulsions continued daily until the 4th; after which they ceased until the 13th. During that interval he was unable to feed himself; also the urine passed involuntarily. After the 13th the convulsions returned, and although conscious, he was paralysed in mind and body. On June 20th he had a severe convulsion, five minutes after which he died.

POST MORTEM EXAMINATION.

Body well nourished. The dura-mater appeared healthy. There were five ounces of serum in sub-arachnoid spaces. The pia mater was slightly opaque. The brain weighed fifty-two and a half ounces.

CASE 6.

H. M. H. No. 313; admitted February 17, 1877; male; age 63

drug broker; diagnosis, circular insanity, first attack of seven months duration.

He had no headache, but his head had not "felt right" for a year. He had a constant numbness in right side and leg; at times also in right arm. Occasionally this numbness was very slight, scarcely perceptible anywhere. He was subject to attacks of asthma. He had been alternately depressed and excited.

In May there was occasional and slight numbness in the right extremities. In the latter part of the month he received a nervous shock by a fall, which produced no discernible physical injury, but made him sleepless and dizzy. In June he had delusions at times; thinking he was pursued by detectives, thinking that the clock would eat him up, being very suspicious. About the middle of the month he was relieved of these fears.

In July there was still formication of both legs, which had followed the accident in May, but there was none in other parts of the body. If he walked a little, there was tremor all over the body. His feet were cold; his memory treacherous; he was constipated. During the last few days of the month, he was duller, his motions were slower, he lay on the bed considerably. He did not notice the numbness unless he was questioned about it. His tongue deviated to the left. His face was expressionless.

In September he was much improved. He exercised more, but there was a stiffness in the right side. The tongue showed no deviation. In the last of the month he passed gradually from a stupid condition into one of great excitement. This transition took place within two weeks. His suspiciousness returned; also his delusions, and he became obscene and profane. On Oct. 12th, he kept moving incessantly; he was sexually excited; he was sleepless; his tongue deviated to the left; he had a passion for devising ways of spending money. The 1st of November found him quieter; he passed gradually out of the state of excitement in which he had been during the preceding six weeks. It is to be noted particularly that in June and October he passed through attacks of acute mania, and that during the periods between, he was depressed and melancholic. The history thus shows a number of alternate attacks of mania and melancholia. On the 1st of Dec., he again become dull; he felt weak and stayed in bed, but suffered no pain; he could scarcely answer a question. On the 4th, he sank rapidly; there was ptosis of the left lid; the left pupil was contracted; the action of the heart was irregular. On the 5th he died.

POST MORTEM EXAMINATION.

The calvarium was one-half thicker, anteriorly than posteriorly. The dura-mater was firmly adherent, requring to be torn off inch by inch. Sub-arachnoid spaces were filled with clear serous fluid, more on the left side than on the right. Amount of serum, three ounces. There was a spot of red discolored serum on frontal lobes the size of a five cent piece; also a stripe along the middle lobes, in the parietal region of both sides, more on the left than right; these spots changed location by pressure; There was no evidence of a clot; whole surface of the convolutions appeared redder than normal. Brain appeared of usual consistency. All large arteries of the brain were thickened; the basilar artery had the feeling of a goose quill. The pia mater peeled easily from the convolu-

tions. The under surface of the brain appeared natural; no sign of clot or ruptured vessel could be found on section of the brain.

There was considerable serum in the ventricles; there was considerable serum in the spinal canal; one of the aortic valves of the heart had a small calcific lump upon it; one kidney had a small cyst. The spleen was smaller than normal; otherwise the examination showed the body healthy.

CASE 7.

A. L., No. 332; admitted April 20, 1877; male, age 54; lightning rod agent; diagnosis, general paresis; first attack of ten months duration. He continually imitated those about him; he had no memory. His habits were filthy. He was afraid at night; he was sleepless, and restless; his appetite was good—pulse 84; there was tremulousness of the lips and muscles about the mouth; he wept often when talking.

On May 1st, the general symptoms were the same; he mistook the other patients, and his own reflection in the glass for members of his family; he was continually undressing; it was noticed on the 10th that, when he stood, he bent backward, and to the right side; there was great tremulousness of lips and hands.

He laughed and cried frequently and alternately; on the 16th it was necessary to keep him in bed to prevent his falling; he was sleepless; on the 23d vomiting and diarrhœa set in; he refused to eat; no longer spoke; there were tremors over the entire body; on the 24th he sank rapidly and died.

POST MORTEM EXAMINATION.

Body well nourished. Dura-mater very adherent to cranium. The sub-arachnoid spaces were filled. Four ounces of sero-purulent fluid escaped. The surface of the convolutions made less resistence to pressure than if normal, but still it was not fluid. There was considerable serum in lateral and fourth ventricles; on section of the brain, nothing abnormal was found, except anæmia. The left lung was adherent; the valves of the heart were normal; the walls of left ventricle were hypertrophied; there was a cyst in left kidney; the spleen was enlarged.

CASE 8.

F. C., No. 343; admitted May 23d, 1877; male; age 40; liquor dealer; diagnosis, general paresis. First attack; duration about three months.

Before admission he had done no business for about a year, and his memory had been failing rapidly. He had also drank liquors excessively.

When admitted he would repeat the same sentence every few minutes; did not recognize where he was, felt happy and pleasant, but had some headache in the forehead and top of the head; and was not strong. On July 20th, tremulousness of lips first noticed. In August very stupid and sometimes obstinate noisy and violent; but generally jolly. Sept. 7th tremulousness of chin and tongue, crying because he felt badly, that is, depressed. He was subject to alternate periods of laughing and crying; he was sleepless, excitable, and destructive of clothing. In October the left pupil was of irregular shape, which continued in December, with ptosis of the left eyelid. He has never been able to dress himself; but

in February, 1878, he had advanced in dementia so far, that he did not know enough to begin to eat, and had to be started; but then he did not know enough to cease eating, and had to be stopped. The pupils have always been of the same size, and generally small. In March his head always hung forward, and he was kept in bed after the 12th of that month. Bed sores had begun, the muscles of the jaws were often rigid, but he always answered that he felt "all right." He gradually sank, and died July 7th, 1878.

POST MORTEM EXAMINATION.

Twenty hours after death. Sub-arachnoid space filled with serum, of which there escaped ten ounces. Arachnoid opaque. Pia mater adherent to cortical substance of convolutions. Brain weight, forty-eight and one-eighth ounces. Lungs not adherent, dark bluish purple; heart walls easily torn and pale; aorta not hard to tear, and has no atheromatous patches; liver easily torn and broken down, of a dark color; spleen small; spinal cord œdematous.

Wherever the pia mater was adherent, and was removed, the cortical substance of the convolutions came away with it, to a considerable depth, and gave the brain a worm-eaten appearance, where this occurred. Photographs of this and other brains were taken, and they show the localities of their adhesions. Looking upon the superior surface of this brain, the two hemispheres are almost exactly alike. The small posterior portion is clear; and a clear space appears, on both sides, about the superior portion of the fissure of Rolando; that is, the anterior and posterior central convolutions are free from adhesions, and a part of the upper parietal lobule. Anteriorly, the frontal lobe is quite thick with adhesions.

On looking at the right side, the occipital lobe is clear, while the upper parietal lobule and the anterior and posterior central convolutions are almost free. The lower parietal lobule, the first and second temporal, and the three frontal convolutions are covered with adhesions. The left is almost identical with this right side.

On looking at the base of the brain, the cerebellum appears to be clear, while the temporo-sphenoidal and frontal lobes have patches of adhesions. On the temporo-sphenoidal lobe, a stripe of adhesion follows the second temporal convolutions inward and upon uncinate convolutions. On the frontal lobe, there are a few spots on the middle frontal, more on the lower frontal, while the gyrus rectus is covered with them.

According to Ferrier's localization of the functions of the brain, these spots of adhesion touch upon or cover the following centres: On the left side, "the centre for the movements of the lips and tongue as in articulation. This is the region, disease of which causes aphasia, and is generally known as Broca's convolution; the centre of the platysma, retraction of the angle of the mouth; the centres for movements of the opposite leg and foot, such as are concerned in locomotion; the centre of vision; and the centre of hearing. On the right side the same are implicated, with the addition of the centre for the movements of the hands and forearm, in which the biceps is particularly engaged, viz.: Supination of the hand and flexion of the forearm; the centre for the elevators and depressors of

the angle of the mouth; and the centres of movement of the hand and wrist.

CASE 9.

T. W. R., No. 350; admitted June 14th, 1877; male; age 54; wire screen painter; diagnosis, senile dementia, in acute melancholia. First attack of eleven months duration. For years he had been subject to severe headaches and attacks of colic; he had had rheumatism in the legs; he had attempted to commit suicide; he appeared to have had complications of lead poisoning, not sufficient, however, to cause wrist-drop or blue line on the gums.

On admission was a broken down man; sight and hearing were failing. The face had an anxious expression. The breath had bad odor. Tongue was coated. He suffered from frontal headache; toothache, and had profuse catarrh. There was tremulousness of the hands. He had pain in the chest; and because of pain in and below the larynx, refused to eat. He generally made a grunting noise, owing both to pain and to depression. Was continually apprehensive of being killed by robbers. On June 16th he had slept but little; was more depressed, and excited; kept throwing his hands about, and was continually crying; drawled the end of words in speaking; gait was unsteady. On the 27th he was kept in bed, being weak. He groaned and cried, but would speak to no one, and refused to eat. The gums were swollen. He kept his hands quiet. He wet the bed. The right pupil was dilated, and the extremities were cold. From this time he gradually sank until the 30th, when he died.

POST MORTEM EXAMINATION.

Body emaciated. The dura-mater was not adherent. The sub-arachnoid spaces were filled with serum, four ounces of which escaped and coagulated after standing. Over the convexity of the hemispheres were five or six red spots of discolored serum, about the size of a five cent piece, which changed position by pressure. There was a depression on superior portion of left frontal lobe, one and one-half inches by one inch, and about one-eighth of an inch in depth. It was noticed immediately upon removal of calvarium. The vessels of the pia mater contained an unusual amount of blood. This abnormal amount of blood was also shown on cutting the white substance. No spot of softening was discovered in the brain. There were adhesions of the left lung. The valves of the heart were natural. The kidneys were normal. The spleen was natural.

CASE 10.

J. M. A. No. 367; admitted August 7th, 1877; male; age 41; truck driver; diagnosis, general paresis. First attack of about six months duration. During his life, at times, he had been intemperate. For several days before admission he had been very violent; yet he could scarcely walk alone. He had been eating but little. When admitted was very weak, and was put in bed. He had many delusions of wealth and power; and was forgetful of names. The right pupil was contracted. On the 16th both pupils were alike. On the 24th the right pupil was contracted. In September he began to improve. On the 9th he recognized his past ideas as delusions. The lips and tongue were tremulous. Sight was gradually becoming impaired. He became rational at this time and cried

because of his condition. On September 12th he began to walk out. In October he complained of not being able to see well. On October 14th the left arm was numb. On November 3d the right side was paralyzed, but he recovered from this on the following day. He was discharged on November 15th being considered able to be at home for awhile. During his stay in the asylum, with the exception of a few days only, the right pupil had been contracted and unchangeable. He was brought back April 10th, 1878. While at home he had appeared to be a little weak minded to his friends, but not insane. The night before he was brought back he attempted to kill his wife. On being re-admitted he was physically weaker, being able to walk but very little. The right pupil was still contracted. There were very peculiar and distressing sensations in the head and spinal cord. No longer had delusions of grandeur, but believed himself to be pursued by enemies. On May 14th an attack of vertigo lasted several hours. On May 22 he recognized the approach of a similar attack and hurried to bed. There was pain in the right side of head; the left hand was numb, the sensation in it being partly lost; he was stupid, and stammered badly, and was unable to remember which was his room. In June the delusions of wealth re-appeared. On the 7th he had an attack of vertigo and stammering. By July 18th the delusions of wealth had disappeared. On July 25th he was feeling badly and looked duller. In the early morning there was numbness in the left hand, which, later, changed to the right hand and side, and lasted during the day. On August 21st an ophthalmic examination showed atrophy of both discs, but especially of the left. In September the tongue was thick; the pupils were similar, and of medium size. Again there were delusions of wealth. On the 12th there was paralysis of the left side, lasting during the day; since returning he has had frontal headache continually. In November kleptomania developed. He had peculiar habit of looking back over the right shoulder; he masturbated. In December kleptomania continued. In January, 1879, he was depressed with much frontal and parietal pain; there were no longer delusions of wealth; during the last of the month he was very dull; could scarcely answer questions. During February he had no appetite; was in bed some days, on others kept about the hall. On the 9th he had an attack of unconsciousness, which began with stammering; there were clonic convulsions of the left side and coma; the next day he was conscious and better; a bed sore started. By the last of the month he was better and sat up. During March much depressed because of his condition; the bed sore began to heal; his weight was eighty-two pounds. On the 7th he had a general convulsion and was comatose. During the rest of the month he remained abed; became duller; and finally died April 4th. It was a remarkable fact that he recognized his nurse a half hour before death.

POST MORTEM EXAMINATION.

Body emaciated; weight about 73 pounds; scalp very thin; skull very thin; the arachnoid was opaque; the sub-arachnoid spaces were filled with serum, which escaped to the amount of three ounces. The brain weighed forty-five and three-quarters ounces.

The pia mater was adherent; the lungs were collapsed; the right apex was adherent posteriorly; the right kidney weighed three and a quarter

ounces; the left weighed three and three-quarters ounces. The spleen was small.

The adhesions shown by photographs, touched or covered the following centres of Ferrier: on the left side, of aphasia; the elevators and depressors of the angle of the mouth, hand and wrist; "lateral movements of the head and eyes, with elevation of the eyelids and dilation of the pupil;" retraction of the angle of the month; vision. On the right side, the same, with the addition of hearing.

CASE 11.

J. D. No. 394; admitted October 4th, 1877; male; age 75; plumber; diagnosis, senile dementia; first attack of five years duration.

He had been kept in the county house for five years, was then brought here with the expectation of being cured! On admission he was utterly demented; could not answer a single question, but talked incessantly and incoherently to himself. Both pupils were contracted in the extreme, and he was almost blind; was continually trying to undress himself; he was abed most of the time, not being able to walk out. He continued in the same condition until the middle of January, 1878, when becoming weaker and drowsy and unable to eat, he died January 24th.

POST MORTEM EXAMINATION.

The skull was three-eighths of an inch thick; there were strong adhesions of the dura-mater in upper parietal region; eight ounces of serum escaped. The convolutions were narrow, not deep, and were separated from one another; the brain weighed thirty-four ounces; it was dark colored, a reddish brown, like light mahogany; it seemed of normal consistence; there was no indication of softening. The lungs were somewhat adherent; there were a number of hard nodules, varying in size from a marble to a butternut, through both lungs, especially in the superior portions. The spleen was small; adhesions were found on liver, pancreas, stomach and duodenum. There was no fluid in the abdominal cavity. The liver was small, black, and very easily broken down, with adherent capsule. There were four large stones in the gall-bladder which was filled with what appeared like thick, white mucus. The duct was obliterated.

CASE 12.

F. D. S. No. 400; admitted October 13th, 1877; male; age 45; salesman; diagnosis; general paresis; first attack of three years duration.

He had been unable to do any work for a long time; had been forgetful. and was unable to care for himself; he had partial paralysis of the extremities; it was said that he had had a sunstroke; and had contracted syphilis while in the army during the war; on admission he was very weak, could scarcely walk; the mouth and extremities were very tremulous; the urine dribbled continually; he had delusions of wealth and knew very little. On October 14th he had a slight apoplecti-form seizure, with paralysis of one arm, which disappeared in a few hours. On the 27th and 28th bent continually to the left and would cry if straightened. On the 30th and for two days following bent to the right. On November 6th there was a short convulsion in the right hand; the pupils were always contracted; he was alternately agreeable and irritable. On the 19th bent to the left during the day. On December 10th bent much to the

right and could not be straightened; frequently choked at meals; he had a peculiar way of looking backward over the right shoulder; often fluid ran out of the nose; had a habit of sucking his lips; at this time bed sores began. On the 30th bent to the left for several days. On January 10th, 1878, was kept abed. On the 19th he was thought to be dying; he had gradually become comatose, respiration was hurried and gasping, and periods of from ten to eighty-five seconds passed without a single respiration; but he rallied, and the next day seemed much brighter. During the middle of February he was frequently so rigid that he could have been lifted by the head and feet; later he grew worse, and had strabismus of the right eye. He died March 1st, 1878.

POST MORTEM EXAMINATION.

The body was emaciated; the dura-mater was not adherent; the subarachnoid spaces were filled with serum, six ounces of which escaped; the occipital lobes and cerebellum were paler than natural; the brain weighed forty-seven ounces; over nearly the whole of the cerebrum the arachnoid was opaque, and of a greenish color; this green color was more conspicuous about the middle of each side of the brain; the pia mater was adherent in spots: the thorax and abdomen were not opened. According to Ferrier the adhesions of the pia mater are in the following regions: left side, centre of aphasia, slightly; of movements of angle of mouth, slightly; lateral movements of the head and eyes, with elevation of the eyelids and dilatation of pupil; of vision; and of hearing. Right side the same, without the centre for mouth movements.

CASE 13.

C. C. No. 455; admitted March 5th, 1878; male; age 37; liquor dealer; diagnosis; general paresis; first attack of nine months duration.

For some weeks previous to commitment to an asylum he was conscious of the approach of insanity, and provided for the distribution of his property. In July, 1877, he was taken to another asylum, and remained there until he was brought here. On admission the disease was far advanced; he had delusions of wealth and power; the right pupil was dilated, and continued so almost constantly during stay; the hands and lips were tremulous; the gait was unsteady; his head was always inclined forward; he was restless, walking about continually; there was pityriasis furfuracea of the face; he gained a little in strength, but continued in about the same condition until October; there were hallucinations and illusions of sight and hearing; he walked much, with an unsteady gait, but showed much strength if opposed or restrained; frequently talked much to himself, and constantly made gestures. On October 30th he had an apoplectiform seizure; the left side was paralysed; for a short time he was unconscious, but on the next day was better and went about as usual. By November 4th he had changed from a stupid, sluggish condition, to one of excitement and restlessness, lasting a week. On January 4th, 1879, there was another apoplectiform seizure, with continual twitching of the left side of the neck and of the left arm, but not of the left leg; he was conscious part of the time; the twitching continued until death, which occurred on January 12th.

POST MORTEM EXAMINATION.

The sub-arachnoid spaces were filled with serum, seven ounces of which escaped; there were no patches of opacity; the brain weighed fifty ounces; the pia mater was adherent; the spots of adhesion were photographed; the thorax and abdomen were not opened. According to Ferrier the following centres were implicated on left side: of speech, scarcely any; of the opposite leg and foot, as in locomotion: "complex movements of the arms and legs, as in climbing, swimming, &c.;" extension forward of the arm and hand; lateral movements of the head and eyes, with elevation of the eyelids and dilatation of the pupil; hearing slightly. Right the same, without lateral movements of the head and eyes.

CASE 14.

E. A. M. No. 457; admitted March 11, 1878; female; age 43; diagnosis; melancholia; first attack from one to two years duration. The following history of the case is taken by permission from the notes of Dr. A. P. Williamson:

When admitted she was in an almost dying condition; was pale and emaciated, with cachectic look. Two years previous she had chancre; on admission she had syphilis ulcerosa on back and limbs; the eyelids and lower limbs were œdematous; by auscultation, mitral regurgitation was shown; she was unable to retain the urine when standing; menses had ceased two years ago; there was profuse leucorrhœa, with occasional blood clots; also distressing hæmorrhoids; she had delusions of poisoned food. After admission she was troubled with diarrhœa and was kept abed. On April 7th the diarrhœa had ceased, but it soon returned; also there was uterine hæmorrhage. She gradually grew weaker until she died April 11th, 1878.

POST MORTEM EXAMINATION.

There was much fluid in sub-arachnoid spaces; two and a half ounces of serum escaped; the brain was very anæmic, almost white; it weighed forty-six ounces; its substance was not as hard as usual; the mitral valve was insufficient; the right kidney appeared normal, but pale; the capsule of the left kidney was not adherent; the cortical substance was thin with three or four deposits, the size of a pea, filled with mucilaginous substance; the pelvis and ureter were enlarged; the liver was fatty, its edges rounded; the capsule was somewhat adherent; the gall bladder was filled with fifty-two stones; the bladder was thickened, its lining leathery; the vagina was thickened and filled in its entire course with warts or excrescences reaching even into the cervix of the uterus; it was three-quarters of an inch thick.

CASE 15.

H. S., No. 463; admitted April 3d, 1878; male; age 47; tailor; diagnosis, general paresis. First attack of two years and a half duration.

When admitted, he was so weak he could scarcely walk alone; his mouth was drawn to left side; the tongue was tremulous, and so paralyzed as to make the few words uttered, inarticulate; there was an involuntary discharge of urine and fæces; he could use his hands but little; his gait was stumbling; he bent backwards; his legs were swollen and bruised; yet this man was forced by his friends to walk from the station

to the asylum, a distance of a mile! After admission, he scarcely left his bed. On April 11th, it was very difficult for him to open his mouth, owing to the contraction of the muscles; he was grating his teeth; and choked when he ate; he was continually picking his body. On the 22d bed sores started. Previous to this time he had been noisy, often shouting, but he became quieter, and died on April 25th.

POST MORTEM EXAMINATION.

There were slight adhesions of the left posterior surface of the duramater to the skull; the sub-arachnoid spaces were filled with clear serum, six ounces of which escaped; the general appearance of the brain was redder than normal; in places there was redness, differing in size from that of a cent to that of a silver dollar; these spots of red were on both sides of the brain, and on each side of the fissure of Rolande, about one inch above its origin; the brain weighed forty-one and seven-eighth ounces; the left carotid artery was thickened about the entrance to the Circle of Willis; large patches of the pia mater were peeled off before some slight adhesions were found on the under surface of the temporo-sphenoidal lobe; also about the fissure of Sylvius on each side; photographs of these adhesions were taken.

The heart valves were normal; there were some atheromatous patches in the aorta and in the walls of the left ventricle; the cortical substance of the kidneys was normal; the lining of the pelvis was white and granular, covered with pus; the spleen was small; the liver was light colored; the implicated centres are the following: Right side, of speech; a retraction of angle of the mouth; vision very slightly; hearing very slightly; left side, the same, with the addition of the elevators and depressors of the angle of the mouth.

CASE 16.

H. H., No. 473; admitted April 20th, 1878; male; age 27; file cutter; diagnosis, acute melancholia. First attack of three months duration.

For a year and a half previous to being admitted to the asylum, his health had been gradually failing; he left following his own trade to try others, which he soon gave up to make new attempts; for some months there had been delusions of being followed and spied upon; finally, acting upon this delusion, he had assaulted a girl, a stranger to him; and then attempted suicide; during the week following this act, and previous to commitment, he refused to speak or to eat; and his insanity became more pronounced; when admitted he was very weak, scarcely able to walk alone, but soon gained a little strength; often refused to eat and cried a great deal; was all the time depressed, wanting to die. By June 1st it was necessary to feed him with the nasal tube; he was fed in this way regularly for a month and gained in strength of body; his mind also seemed a little brighter; after the first of July, he began to be taken out to walk almost daily; in December, he had improved so much as to be able to read the papers, to draw pictures and to talk quite rationally of the past.

In February and March, 1879, he had relapsed somewhat; it was necessary occasionally to feed him. In May he was better again, and

worked a little about the ward; but in June he was worse; he cried continually, and bent his head forward always. On July 4th he escaped from his attendant, and was run over by a passing train; both legs were cut off between the knees and body; although no blood of any amount was lost, he died in an hour, having been comatose all the time.

POST MORTEM EXAMINATION.

There was very little serum in the sub-arachnoid spaces, only one and a quarter ounces escaping; on both sides of the brain was an opacity of the arachnoid, extending from the fissure of Sylvius upward to the median line, and forwards to the frontal angle. In color the gray matter appeared normal. The brain weighed fifty-three and three-quarters ounces; it was of normal consistence, being neither harder nor softer; the vessels of the pia mater were well filled with blood, the capillaries showing more distinctly than in any other examination made; there was no clot in the brain, nor marked appearance of congestion, more than that stated in the pia mater. The lungs were not collapsed, their color was natural; the left one was adherent at the apex; there were three or four calcific nodules in the apex; the heart contained fluid blood and no clots; it weighed seven and a half ounces; there were a few small spots of atheroma in the aorta; the kidneys, spleen and liver were natural.

CASE 17.

M. B. No. 495; admitted June 18th, 1878; female; age 22; diagnosis; epilepsy; of years duration. The notes of this case are taken by permission from the records of Dr. Wm. M. Butler. When admitted, she showed very plainly the effects of the disease, being advanced in dementia; she was dull, unable to speak distinctly or to talk intelligently; she had never menstruated; her fits had occurred generally at night.

From date of admission until July 20th she had forty-seven fits; during a few days of this period they were more frequent than usual, she having had on July 17th nineteen fits within twenty-four hours; the result was great weakness, with fever; heat in the back of the head and spine; restlessness. During this illness the fits ceased and she gained strength. On the 25th she had two fits; again there was heat in the back of the head and spine. From the 1st to the 18th of August she had no fits. From August 22nd to October 9th she had twenty-seven fits. From October 10th to December 16th she had twenty-six fits. From December 17th to February 13th she had thirty-one fits. From February 14th to May 24th she had forty-seven fits. During this last period she gradually failed in mind and body. On May 26th she had had during the twenty-four hours twenty-two fits; she was semi-comatose and unable to swallow. In the early morning of the 27th she had four fits, which were the last. She was unconscious on the 30th. From the 27th she sank gradually until her death, May 31st, 1879.

POST MORTEM EXAMINATION.

The cranium was not similar on both sides, the right side being considerably larger than the left; the calvarium along the sagittal suture was depressed; the dura-mater was very adherent to the calvarium, especially along the sagittal suture, so that in its removal it was considerably torn; there was scarcely any increase of serum in the sub-arachnoid spaces; in

color, the brain was somewhat paler than normal; the convolutions were smaller than normal and appeared to be increased in number. The medulla was of a brownish color externally; within, there was a little of the same discoloration; this coloring was a general tinge, not in spots; the sulci were shallow; the brain weighed forty-eight and one-half ounces; it was of normal consistency; there were no clots anywhere in the brain, and no patches of recent inflammation or new growths. The lungs were firmly adherent to the thoracic walls; the lower part of the left lung was thick, heavy, and rather easily torn.

There were some atheromatous patches in the aorta. The capsule of the kidneys was adherent. The pelvis was grayish brown in color. The uterus was of normal appearance. Neither ovary was normal; the right was small, and not of natural appearance; the left was nothing but a cyst, filled with clear fluid, about two inches by one inch.

CASE 18.

J. E. C. No. 500; admitted June 24th, 1878; male; age 45; a carman; diagnosis, general paresis. First attack of one year and four months duration. When brought to the asylum, the disease had progressed so far that he could remember but little of his life or give a rational answer to a question; his lips and hands were tremulous, and his gait unsteady. There was no change until August 1st, when he had an apoplectiform seizure; the coma lasted an hour or two, and during the rest of the day be was stupid; there was also continual motion of the left arm, and often twitching of the hand and vomiting; he remained dull. On the 3d his right arm was paralysed. On the 4th the paralysis had disappeared, and he moved his hands as usual. On the 6th he was up again; during this attack he was catheterized; his pupils were always contracted; he was always jolly and laughing. Up to February, 1879, he gradually lost ground; although he kept about the hall for most of the time, yet often he was obliged to stay abed for severel days; after this he was kept in bed all the time. On February 10th he became comatose, with firm contraction of the muscles of the jaw, and clonic convulsions of the left arm; the twitching of the left arm continued until the 12th when he died.

POST MORTEM EXAMINATION.

Body was well nourished, and rather fat, which was remarkable for a paretic, and especially in one so long ill. The sinuses and large vessels contained a greater amount of blood than usual in paretics. The subarachnoid spaces were filled with serum, six ounces of which escaped; over the convexity, the arachnoid bulged out, looking like blisters; the arachnoid was opaque over the convexity and on the sides; the brain weighed forty-nine and a half ounces; the heart weighed twelve ounces; its substance was rather easily torn; the right kidney weighed five ounces and its pelvis contained pus, with its lining opaque; the left kidney weighed eight ounces and was normal; the spleen weighed four and a quarter ounces; an accessory spleen, the size of a three cent piece, was found.

CASE 19.

E. H. B., No. 514; admitted July 11th, 1878; male; age 67; farmer diagnosis, senile dementia. First attack of nine months duration. He had been a hard working, prosperous farmer; but for several years before

admission here, he had been troubled by family quarrels, and by money difficulties; as a consequence, his health was affected seriously.

When admitted, he was weak, scarcely able to walk, and was obliged to lie upon the bed most of the time; his face had a very piteous expression, as he believed himself to be in constant danger; his weight was one hundred and twenty-five pounds, height about five feet eight inches; his face was wrinkled, as in advanced age; each eye had a very distinct arcus senilis, and the radial artery was too stiff to give any pulsation; the pupils were contracted; he had very little appetite, and would eat but little; cried a great deal, and was continually undressing. In August he was stronger and sat up more, and sometimes walked out of doors a little; but when sitting up his feet would swell, and then he had to lie down or keep his feet up in a chair.

There was very little change in his condition until December, when two or three spots appearred on his feet, which indicated the beginning of gangrene; these spread slowly up to the ankles, but never above them, while others appeared on the feet. After May, 1879, he did not leave the bed; he never suffered physical pain, with the exception of a few days about June 9th, when he complained of pain in the right side; it was necessary to feed him a few times. There was pityriasis versicolor on the chest. He gradually sank until he died, June 25th, 1879. During his stay he was never violent and had been able at almost any time to give a rational answer to a simple question. He could talk a little, but slowly, on the morning of the day of his death.

POST MORTEM EXAMINATION.

Thirty hours after death. Very little rigor mortis. The body was very emaciated; there was very little hypostatic congestion; the skin was white; the dura-mater was very adherent to the skull, and could not be detached; the sub-arachnoid spaces were filled with serum, seven ounces of which escaped. The brain appeared whiter than normal—anæmic. It weighed forty-seven and seven-eighths ounces; when placed upon a plate it slowly flattened, until it became only about two inches thick; in sinking it tore away from the crura cerebri. By the side of the left olfactory nerve, and internal to it, being nearly similar in size and shape, was a patch where the grey matter was brown and of softer consistence than the rest of the brain; it was not decidedly soft; not fluid by any means; there was a similar patch, not so marked, however, in the corresponding place on the right side of the brain; on neither side did the discoloration extend through the grey matter, and generally it was not so deep. The right thalamus opticus was very white, the left thalamus was softer and of a dirty brownish color; the carotids, vertebral and basilar arteries were calcified; they were as stiff as goose quills. The smaller cerebral arteries were thickened, but not so pronounced as the larger ones; no clot was found in the brain, nor other soft spot than those described; both of the lungs were pink, and well filled with air anteriorly; the left was somewhat adherent, with some serum in cavity; considerable blood ran out on section; the right contained no fluid in cavity On section, posteriorly, considerable sero-purulent fluid escaped, and the lung substance felt hard, like liver The heart walls were strong; it weighed eight and a quarter ounces; the cavity and aorta contained a firm white clot,

nine inches in length; there were a few small calcareous excrescences in the aorta above the valves. The left kidney weighed four and a quarter ounces, and contained a small calculus; the ureter ran from the side, instead of the usual place. The right kidney weighed three and a quarter ounces; neither looked abnormal. The spleen weighed two and a quarter ounces. The liver weighed thirty-three and a half ounces, and looked natural.

CASE 20.

W. B. L., No. 609; admitted June 31, 1879; male; age 43; actor; diagnosis; general paresis. First attack of fourteen months duration. About twelve years previous to admission the right side of his face became paralysed, while conversing; he did not lose consciousness; he used electricity, and recovered from the paralysis in about six months. Three years previous his memory appeared to be impaired; also about the same time he suffered with pain, deep in back of the right eye, the sight of which began to fail During three or four years he had been troubled with a number of diseases of the liver, kidneys and bladder. On admission his height was five feet seven inches, weight was one hundred and thirty pounds, while usually it was one hundred and fifty-four; his face was dull and expressionless, as if covered with a mask; he was blind in the right eye; the urine dribbled continually; he declared that he felt perfectly well; he had delusions of ability, thinking himself to be a great writer; he was a kleptomaniac. In March he seemed less dull, and walked out daily. Weight was one hundred and twenty-five pounds. On the 1st of April ulcers appeared on the hips, sacrum and legs; he had to be kept in bed. On the second he was very dull, scarcely recognizing any one. By the 7th had sunk so low, that no radial pulsation could be felt. Although he had stertorous breathing and blowing cheeks, he could be roused enough to recognize his friends. He died on the following day, April 8th, 1879. A slight radial pulse was felt on that day, which continued nearly to the time of death.

POST MORTEM EXAMINATION.

The sub-arachnoid spaces were filled with serum, four ounces of which escaped. The brain weighed forty-nine ounces; upon the removal of the anterior part of the brain a tumor was discovered; it was flat, and of the size and shape of two nickle five-cent pieces, one placed upon the other; it was strongly adherent to the dura-mater, but it was removed with the brain; it had implicated the right optic nerve, anterior to the commissure, and caused complete atrophy, there remaining nothing but the enveloping membrane. The left optic was not included by it. The right carotid was stiff, like a goose quill; it was surrounded by the tumor, which followed it down into the cavernous groove; part of the tumor was adherent to the olivary process, and when it was removed, the process appeared very prominently; on cutting through this thin plate of bone, about a dram of pus ran out from the interior of the sphenoid bone. The lungs had a not unnatural appearance, but there were a few old adhesions, especially of the right side. There were white, hard clots in both ventricles of the heart; the walls were flabby; the valves were normal; there were some patches of atheroma in the aorta. There was more than usual

amount of blood in the kidneys, but the cortical substance appeared normal; the lining of the pelvis of the right kidney was opaque, and it contained a little purulent urine; the spleen was small; the liver, on section, showed an unusual amount of blood. The walls of the bladder were about twice the natural thickness; the lining was opaque, and some thick, purulent-looking fluid adhered to it. The following centres showed adhesions: left side, speech: movements of opposite leg, for locomotion: lateral movements of head and eyes: elevation of eyelids, and dilation of pupils; very slightly: retraction of the angle of the mouth: movements of the hand and wrist: sight : hearing. Right side; speech: opposite leg and foot, as in locomotion: lateral movements of the head and eyes, with elevation of the eyelids and dilation of pupil, slightly: elevators and depressors of the angles of the mouth: sight: hearing.

CASE 21.

J. R., No. 638; admitted April 1st, 1879; male; age 31; musician; diagnosis; mania chronic. First attack, duration eleven months. In 1874 he had a gastric difficulty for some months, and then passed a tape worm thirty-five feet long. He had become confirmed in the use of hypodermic injections of morphia, as was shown by the very large number of eschars upon the arms and legs. May 31st, 1878, he was sent to an asylum, was taken to another August 20th, 1878, and then was brought to this asylum April 1st, 1879. When in the other asylums, "he had delusions of unbounded wealth, thought himself various famous personages, and had grand and impractical business projects."

When admitted was pale and weak, his conversation was incoherent, and he had the same delusions of wealth. The right pupil was dilated, the left was triangular, and both responded slowly to light. From May 1st until October he had an attack of obstinate vomiting, once every four to six weeks, each one kept him abed for about a week, during which time he was quieter and more rational than usual; the vomiting came without any apparent cause, and it could not be checked in its course; in the intervals between the attacks he was incoherent, noisy, destructive and often violent. At the beginning of the year 1880 he weighed twenty-five pounds more than when admitted. On the 11th of January, in the evening, he could scarcely see anything for two hours. The next morning, at four o'clock, he awoke and talked rationally of his illness, and dressed himself without any assistance, the first time since his admission. This "lucid interval" lasted two hours, and then he was dull again. A day or two afterward he was so dull and weak that he was kept in bed; he then suffered from retention of urine, and a soft rubber catheter was passed. Afterward the urine dribbled continually and was discolored with blood. He gradually failed in mind and body, and died January 27th, 1880. He was able to recognize those about him until an hour or two before his death. His right pupil was dilated during the entire time of his residence here.

POST MORTEM EXAMINATION.

Eight hours after death; rigor mortis marked; Hypostatic congestion of back and shoulders. The anterior part of the body unusually fair and white; there appeared to be at least two or three hundred cicatrices upon the extremities, resulting from the hypodermic injections; greenish post

mortem discoloration in supra-clavicular regions. Body round and well nourished, Blood did not flow when the scalp was cut; the calvarium of normal appearance; the dura-mater appeared natural, but was somewhat adherent to the calvarium about the vertex; only a small clot of blood in the longitudinal sinus. Pacchionian bodies normal. Sub-arachnoid space filled with serum, mostly about the top and sides of the middle lobes; the arachnoid, in this situation, opaque, and, somewhat also, over the frontal lobes. Brain weight, fifty-two and one-eighth ounces; consistent, color pale anteriorly, less so on posterior two-thirds; the convolutions appeared of natural size, close together, and not showing the sulci between; when separated the sulci appeared of normal depth. The cerebral arteries appeared normal, and contained no thrombi; the pia mater not adherent to the convolutions. On cutting through the white substance it was whiter than normal, and scarcely any blood flowed from the cut capillaries; the lateral ventricles centained a natural amount of serum. In the choroid plexus, of each side, were a number of small transparent cyst, about the size of a pin head, and fifteen or twenty in number at the posterior portion; serum escaped, one and three-quarter ounces. The lungs filled the thoracic cavity and covered the heart; they appeared normal anteriorly, but posteriorly they were darker, and the lower lobes were bluish red; there were no adhesions and no serum in thoracic cavity. Three or four black patches were seen upon the posterior surface of the lungs, from one-half to two inches in diameter; they extended into the lung substance from one-quarter to one inch, and were softer than lung tissue; one was also found deeper in the substance of the lung.

The heart was surrounded by a normal amount of serum in the pericardium, weight ten ounces; right ventricle contained liquid blood with some soft clots; its walls and valves normal. In the left ventricle was some fluid blood, and a gray color of the upper part of its wall; the walls were one inch thick, strong and tough; some small atheromatous patches in the ascending aorta. The appearance of the abdomen was natural, except the transverse colon; that crossed the cavity about four inches above the symphisis pubis. The omentum was normal. The stomach distended with gas; the colon contained hardened fecal matter; there were no adhesions of the peritoneum, and no fluid in the cavity. The left kidney weighed four and a half ounces; its dimensions were four and a quarter, two and a quarter, and one and a half inches; capsule somewhat adherent; cortical substance normal. The right kidney weighed four and three-eighths ounces; its size and appearance about the same as the left; the pelves of both kidneys were gray and opaque. The supra renal capsules were both alike, three inches long and one wide, and were normal. The spleen weighed two and one-half ounces; it was four inches long, two and a half broad, and one inch thick; and was of normal appearance and consistence, although the capsule was adherent. The pancreas weighed three ounces and appeared normal. The stomach was dilated and contained from one to two pints of fluid; the lining was a slate brown color, and the walls were somewhat thicker than natural; there were no ulcers and no marked sign of disease. The liver weighed thirty-eight and one-eighth ounces; its length eight and its breadth six inches; it was dark colored, consistent, and the capsule slightly adherent. The gall bladder contained

no stones, but was filled with glutinous, tarry fluid. The bladder contained about half a pint of bloody colored urine; the walls were a half inch thick, and tough; the lining was red and blue with white stripes upon the rugæ; these stripes were harder than the rest, and gritty in feeling, which was owing to a deposit of phosphate chrystals. The intestines appeared natural and contained nothing abnormal.

CASE 22.

A. K., No. 641; admitted April 3d, 1879; female; age 58; midwife; diagnosis, melancholia; first attack of four months duration.

The notes of this case are taken by permission from the records of Dr. Wm. M. Butler.

Before admission her memory was defective, and she had hallucinations of hearing. She was afraid of people about her; was of unclean habits; had had several epileptoid seizures; had difficult articulation, and impaired motion and sensation. In 1866, she had been sunstruck.

After admission, was noisy and uneasy; sleepless; often cried. Had pain in the head, running forward from the occiput through the head to the forehead. In June there was a slight, transient attack of paralysis of the whole left side; when asleep it was hard to arouse her. On August 21st she was very much bent to the left side; the left eyelid was œdematous; on the 26th another attack occurred, more general in character, but worse on the right side, with stammering speech. In September she could walk with assistance; the difficulty of using the right side continued in November, and partial loss of sensation connected with it. In December the bowels were more affected; tympanites began and lasted for two weeks; then diarrhœa set in; at the same time there was painful urination; during December, she was confined to the bed, and gradually failed until she died January 9, 1880; she was conscious, but dull, the day before death.

POST MORTEM EXAMINATION.

The dura-mater was quite adherent over the superior part of the frontal lobes; the sub-arachnoid spaces contained considerable serum, three ounces of which escaped; the arachnoid over the convexity of the brain was opaque; the brain weighed forty-one and three-eighths ounces; the walls of the middle and posterior cerebral arteries were opaque, but not stiffened; there was no clot anywhere, or appearance of softening; the lungs were collapsed and somewhat adherent; the left lung had a few small calcareous nodules; the heart weighed fourteen and three-quarter ounces; inside one aortic valve, there was a small, calcareous excrescence; there was some atheroma in the aorta.

CASE 23.

M. T., No. 645; admitted April 19th, 1879; male; aged 35; laborer; diagnosis, dementia; first attack of two years duration.

This man was a tramp; he was found wandering about the country, and was unable to give any account of himself, farther than name and occupation; as he was so demented, it was thought that the duration of the disease producing such a condition must at least be two years, and it was called the first attack. When admitted, he was weak, but able to walk about; he was very restless with flushed face; he seemed to be religious,

knelt a great deal, and appeared to be praying; sometimes would eat but little; continued in the same condition until the 1st of May, when he had some fever and was kept in bed; this illness was diagnosed, pneumonia; on the 2d of May, he suddenly sprung up in bed, and almost immediately died; during the two days of the feverish condition, he was much of the time delirious, and often muttered to himself.

POST MORTEM EXAMINATION.

Body well nourished. Back of the left ear there was a small indentation, which did not show inside the skull; it was said to have been made in childhood by the kick of a horse; the sub-arachnoid spaces were not filled with serum; there was but little in them; no serum flowed away, but a couple of drams collected in the skull, after the brain had been removed; the gray matter was unusually white, anæmic; while on the other hand, the sinuses were unusually full of blood, and much flowed in cutting through the scalp; the brain weighed fifty-three and one-quarter ounces; the lungs were not collapsed; the left lung was very heavy, and was adherent to the walls of the chest; these adhesions were not strong; the upper part of the left lung was filled with fluid blood; the lung substance was hard like liver; the left thoracic cavity contained about six ounces of clear serum; on section of lower part of left lung, purulent serum ran away, and some clear pus; the right lung was filled with fluid blood like the upper part of the left lung—not hard like the lower part—at the superior part, however, there were a few small calcified nodules; the heart was normal, but empty of blood; the kidneys were normal, except that the left one had a small cyst just beneath the capsule.

CASE 24.

W. R. B., No. 680; admitted July 14th, 1879; male; age 46; bookkeeper; diagnosis, general paresis; first attack of ten days duration.

Five months previous to admission, there was an incomplete paralysis of motion in both legs, from which he recovered after using electric baths several times; ten days previous, he became unusually talkative, and was unable to sleep; had not been violent, but there were delusions of ability and power; when admitted, he was completely worn out from sleeplessness, excitement and perpetual motion; the pupil was dilated; after two or three days, he had sleep some and was a little stronger; the delusions changed from those of power, to those of wealth; weight at this time was one hundred and seventeen pounds; on the 21st after talking incessantly for several days and becoming hoarse, he raised some blood; talked so rapidly that he would not eat and had to be fed; both pupils were similar and dilated; remained quiet in bed until the 3d, constantly muttering to himself, and became a little stronger; in the evening of the 3d, had a severe chill, which was not followed by any change from the usual condition; at this time bed sores started; on August 11th, although he could not tell time by the watch, he instantly doubled the number twenty-seven which had been spoken aloud, and which was the number of pulsations to the quarter minute; was quiet and rational; at times had been troubled with diarrhœa; he required catheterizing frequently, but often the urine dribbled continually; on the 20th, the tongue deviated to the right; he was hoarse and coughed some; in the evening there was a slight hemor-

rhage from the lungs; he was rational but dull, and thought himself to be dying; on the 21st there was again a hemorrhage from the lungs; on September 4th, another and severe hemorrhage; afterwards was rational, brighter, and as he said, "hungry as a bear;" talked almost constantly, sometimes showing hallucinations of hearing; kept his head turned back, and looked over his shoulder; sight was good; he lost strength gradually until the 14th when he died; he had been conscious in the morning and died in the afternoon; a considerable part of the time, this man recognized his condition; still he always said that he felt well and suffered no pain, being cheerful and pleasant, as is so common with paretics.

POST MORTEM EXAMINATION.

There was some serum in the sub-arachnoid spaces, two and three-quarters ounces of which escaped; there was opacity of the arachnoid, but it was bi-parietal, and not in the frontal region; there was also some opacity on the cerebellum on the inferior surface, running across the centre from each side, where it was about the size of a silver dollar; the brain weighed forty-seven ounces; the basilar artery was thickened, and had opaque spots in its walls; the right lung was not adherent; the left one was adherent; it contained a hard lump, the size of a walnut, which made a mark on a white surface like lamp black; there was none elsewhere; there was a small patch of atheroma in the aorta; the spleen weighed four ounces; it had a white patch on the capsule, larger than a silver dollar and about a sixteenth of an inch thick; the following centres were affected; left, speech, movements of the opposite leg and foot, as in locomotion; complex movements of the arms and legs; extension forward of the arm and hand; lateral movements of the head and eyes, with elevation of the eyelids and dilation of pupil; depressor of the angle of the mouth; sight, very slightly; hearing; right side, the same, with the addition of elevator of angle of mouth; and retraction of angle of mouth; the centre of sight did not appear to be affected.

CASE 25.

J. B., No. 699; admitted, August 14th, 1879; male; age 51; railroad engineer; diagnosis, acute melancholia; third attack, of two months duration.

There was a predisposition to insanity in his family. For a long time he had been ruptured on both sides, and this condition together with worry about some business trouble were said to be the causes of his present attack. His height was about five feet six inches; he was thick set, with short neck; the top of his head was bald and arching; the skin was dark, the hair black, eyes dark. When admitted he was much depressed; would scarcely speak; his eyes were staring—arcus senilis well marked; on the 16th he was worse; crying and throwing hands about head, and talked of committing suicide; on August 18th, weight was one hundred and twenty-four pounds; was more excited and began to butt his head against the wall; after this, at times, refusing to eat, it was necessary to feed him; he would not say anything, and appeared very stupid; on August 24th, he arose in the morning and dressed, appearing as usual; while standing by the window he suddenly fell unconscious upon the floor, without making any cry; his heart beat a few times after this fall, and

then he died; his face was blue and he was lying upon the left side, but tipped forward toward the breast.

POST MORTEM EXAMINATION.

Body well nourished; when cutting through the scalp, it bled considerably; the dura-mater was quite adherent superiorly and posteriorly to the cranium, especially on the right side; on turning back the dura-mater, the brain appeared of an unusually dark color over the whole anterior three-fourths, being similar on both sides; this was owing to the large amount of blood in the vessels of that portion of the brain; at the angle of the left frontal lobe, just over the left eye, began a clot which continued backwards two or three inches almost to the Fissure of Rolando; it was about one eighth of an inch wide, and was not an old clot, having a very fresh appearance; this was lying upon the arachnoid, and was uncovered by the removal of the dura-mater; the serum in the sub-arachnoid space in front, where this clot began, contained a second and smaller clot which was about the size of a small cent piece; several other small clots were also found floating in the serum.

The brain was sliced thoroughly but without finding any clot elsewhere than as stated; a cyst of the size of a pea was found in the left choroid plexus; the heart was hypertrophied; the walls of the left ventricle were one inch thick; the foramen ovale was closed, but the partition was very thin and was the size of a silver five-cent piece; there was a large, strong, white clot in the right side of the heart; the left side was empty; the valves were normal; there were a few small atheromatous patches in the aorta; the kidneys had large amount of fat about the pyramids; the left one weighed seven and one-half ounces.

CASE 26.

J. T., No. 714; admitted Sept. 18th, 1879; female; age 66; diagnosis, senile dementia; first attack, of four weeks duration.

The notes of this case are taken by permission from the records of Dr. Wm. M. Butler.

When admitted her memory was very defective; she walked about without realizing her surroundings; she had hallucinations of sight, but at times did not believe in them; the right eye was congested and sensitive to the light; the left eye was less so; she was sleepless, and had frontal headache; on Sept. 24th she fell upon the floor unconscious, but soon recovered sufficiently to move her limbs, but was not able to walk; on the 25th was able to walk; on the 27th was unable to walk, and kept head bent forward; on Oct. 7th a bed sore started, and she was unable to leave the bed; after being comatose for a few days, she died Nov. 5th 1879.

POST MORTEM EXAMINATION.

The sub-arachnoid spaces were filled with serum, four and a half ounces of which escaped; the brain weighed forty-eight ounces; the pia mater was not adherent; there were some old adhesions of both lungs; there were three or four small calcareous nodules in the right lung; the examination showed the other parts to be about natural.

CASE 27.

E. H. B., No. 732; admitted, Oct. 30th, 1879; male; age 35; clerk; diagnosis, general paresis; first attack of two years duration.

For about two years he had been unable to do any work, feeling ill. Electricity had been used, but the paretic symptoms advanced in spite of it and all other remedial measures.

When admitted, he talked continually to himself in a husky voice about financial plans, and the condition of his throat; he was thin, very pale and very weak, but persisted in walking as much as possible; weight was one hundred and twenty-three pounds; height was about five feet ten inches; there was some tremulousness of lips and hands; generally he would answer questions rationally; he recognized his illness almost always; during November, lost ground rapidly; was dirty and destructive; often had to be fed until the last of the month; at this time a bed sore began; on the first of December, weight was one hundred and twenty-five pounds; he was pleasant and felt well; on the 7th, his feet were œdematous and he was kept in bed; on the 12th, while dressing the penis which was œdematous, there was a seminal discharge; he became weaker and died Dec. 15th, 1879.

This man recognized the gravity of his disease before admission and afterwards also, although advanced in dementia and death almost upon him.

POST MORTEM EXAMINATION.

The sub-arachnoid spaces were filled with serum, five and a half ounces of which escaped; the arachnoid was very opaque, a white cloudiness so that the convolutions did not show well in some places; this opacity did not cover the occipital lobes, but was over the superior and lateral surface of the rest of the brain, not on the base; it was also found upon the cerebellum, on its superior surface, when the overlying hemispheres were separated; the brain weighed forty-eight and one-quarter ounces; the pia mater peeled readily from any part of the brain, without bringing away any of the cortical substance of the convolutions; there was no fluid in the thorax; the lungs filled over one-half of the chest; they looked natural, anteriorly; posteriorly, they were a bluish red; the right lung was not adherent; the left lung was adherent superiorly and same posteriorly; the heart weighed nine ounces; there was a small white clot in the aorta and left ventricle; in the left ventricle was a white patch about an inch in diameter: the valves were normal; there were no atheromatous patches in aorta; the right kidney weighed five and a half ounces; the left weighed six and three-quarter ounces; the cortical substance was one-half normal thickness, otherwise appeared natural; each kidney had considerable fat about the pyramids; the spleen weighed three and three-eighths ounces; its appearance was natural; the liver weighed fifty-six ounces; appearance natural.

It is remarkable that in this case of general paresis, the pia mater was not adherent to the cortical substance.

The plan of J. Crichton Browne, M. D., has been followed in the preparation of these brains for photographing: of placing the fresh brain in a fluid, composed of nitric acid one part and water seven parts, and leaving it until the pia mater could be easily removed, which was from one to three weeks. We found that the irregular indentations would not show plainly in a photograph, and therefore we painted them upon the surface of the brain, with India ink.

In summing up the location of the lesions in the brains of paretic patients, as shown by the patches of adhesion, we find no two exactly alike. In all but one there were adhesions in some part. In all of these there were spots on the frontal lobes, the intellectual centres, and although the amount of surface involved was greater in some than others, yet all died very demented. It would, therefore, be impossible to estimate the amount of diseased surface by the degree of the existing dementia.

In no case was the cerebellum affected; but in some the occipital lobe was not free from adhesions; and, in this respect, our finding disagrees with that of many others.

Our object in having photographs taken is to ascertain the relation between certain symptoms, physical and mental, and certain portions of the diseased brain. By comparing a large number of histories with the photographs taken afterward, we hope ultimately to attain not simply a correct diagnosis, but a definite knowledge of the nature of the disease, with its extent and exact localization. And even now considerable progress has been made in this direction, from the study of these few cases.

Of all this number of brains, but one resembled softening, No. 19. Instead of having had an embolism or cerebral hemorrhage, with paralysis and subsequent softening, the man had slowly broken down in old age with senile dementia. This single case, one of twenty-seven, will not, therefore, substantiate the popular idea of the frequency of cerebral softening among the cerebral affections.

Attention is also called to the physical condition, when admitted, of those who have died. Of those who were strong and able to walk about the grounds, there were seven; of those who were not strong but were, nevertheless, able to walk outside, there were eleven; of the weak ones, able to walk a few steps, but only on the ward, there were seven; while two had to be carried to their rooms. There were eleven paretics in this number, who were known to be incurable when admitted.

Some serum escaped in every case, and although the extreme amounts are widely separated, one being one-quarter of one ounce and the other ten ounces, the rule is, that serum may be expected in post mortem examinations of the insane. The average amount of twenty-six cases was four and eight-tenths ounces. The average of the eleven paretics was five and four-tenths ounces. It appears also, that the amount of serum is less in those dying quickly or from an acute attack, and the brain-weight greater; or, conversely, that a lingering death and a long time abed increases the serum and decreases the weight of the brain.

It would be very difficult to state exactly the cause of death in very many of these cases. Exhaustion or asthenia would, no doubt, be sufficient, but that lacks definiteness. In many a large amount of serum may produce compression and, consequently, diminished action of the medulla oblongata or other centres; but that would not account for other and similar cases where there was very little serum. We must therefore conclude that the serous effusion is simply one of the factors in the termination of life.

Many writers have claimed that they found a very large percentage of diseased hearts in the insane, but that has not been our experience. The aorta often contains small atheromatous patches, but the valves have gen-

erally appeared normal, and our estimate of the frequency of hear disease must be far lower than theirs.

It does not appear that sufficient attention has been paid to the size and weight of the spleen. In Gray's anatomy, the average weight of the healthy spleen is seven ounces, its length five inches, its breadth three to four inches, and its thickness one to one and a half inches. Of these twenty-seven cases, three were not examined; one was enlarged, its weigh being probably about twelve ounces; eight were natural; eight were small, probably about five ounces each; one, four and a quarter ounces; two, between three and four ounces; three, between two and three ounces, and another might be added, making four, as it was three by two inches in diameter. That is, of the twenty-four, one was larger than natural, and twenty-three natural or smaller; of the twenty-three, fifteen were smaller. We have, therefore, from these cases the conclusion, that the average weight of spleen found in post mortem examinations of the insane is considerably below the normal. Whether this diminution is a cause, or a resultant of the mental disease, is impossible to state at the present time, as information upon this point is wanting or very meagre in the books.

With increased experience and numbers, and constantly added information upon the pathology of insanity, we hope to add something, year by year, to the great fund already possessed.

XXXIX.

Acute Delirious Mania.

By C. SPENCER KINNEY, M. D.

In considering this subject as distinct from acute mania, a few words of explanation may be deemed necessary.

The power to define a disease so that it may be recognized from the description given is no simple task.

It may be stated briefly that acute delirious mania is an intensified form of acute mania accompanied by delirium, and ordinarily terminates in exhaustion and death. Although occurring infrequently, yet it may be counfounded with typho-mania, and acute mania.

The diagnosis in either case is not easy, but in a patient suffering with the deliria of typhoid, we have the characteristic temperature of that disease to assure us.

In diagnosing between acute and delirious mania, we find what amounts to an excitement in one, exaggerated to violence with complete incoherency, and only brief intervals of quietude in the other. The inception of this disease, like many cases of simple mania, may be sudden; but the outbursts of maniacal fury are more severe, and almost wholly uncontrollable by any appeal to the understanding.

The prognosis is generally unfavorable, while the opposite may in mania be considered the rule.

In this form of mania a noteworthy feature is the remissions occurring in the periods of excitement.

With some the lucid interval may be exceedingly short in duration, and only partial. In my second case it was incomplete—the patient would occasionally answer a question hastily, and then relapse into a low form of delirium.

Dr. Brierre De Boismont in writing of this disease divided it into two (2) stages—first, that of excitement; second, that of collapse.

During the first period the face of the patient presents a peculiar appearance, having a mixture of incredulity and maliciousness in its expression. The eyes are usually bright and active, and as is common in acute disturbances of the brain, may roll, or be turned from their natural direction. In the course of the attack the patient often grinds his teeth for hours, although apparently in no pain. The lips and teeth become covered with sordes, and require the utmost care to keep them in a cleanly condition. Frequently they spit a great deal—the spittle being of a decidedly tenacious character, and they are wholly unmindful of where they deliver it. The tongue is generally coated brown and is dry and cracked, but may be bright red. A peculiarity often noticed in this disease is the strong aversion to liquids, especially water—even the food has in most instances to be forcibly administered.

The skin is dry and hot, and has been described as imparting a burning sensation to the touch.

During the period of excitement the patient may keep some portion of his body in continual motion. In one case coming under my observation, the hands were kept moving in circles alternately over the head and chest, and unless restrained would maintain the motion for hours.

Hallucinations of sight are commonly present. Objects appear in the air, and on the walls, causing the patient to keep his eyes and head moving about in his attempt to follow the shifting forms that arise to his disordered vision.

In some instances the patient is noisy and demonstrative in his delirium, in others quiet and muttering, while few maintain an obstinate silence throughout the whole of their attack. At this time he does not readily recognize people, or realize his condition, and is incoherent and confused in his utterances.

The sleep obtained practically amounts to nothing. In the cases cited during the first week it did not aggregate ten hours. At the expiration of a week or ten days should the patient begin to sleep, it may be considered a most favorable symptom.

The temperature is high, and in my second case a sudden increase, after it had for two or three days at 104, first indicated the collapse which followed. The stage of collapse may be very brief, or continued for several days, according to the strength of the patient, and no special symptoms can be given of its course.

The cases given illustrate the course of the disease. On entering, the first patient mentioned,possessed a more rugged constitution, and was not reduced as the second one was by poor living and overwork.

CASE FIRST.—Admitted November 5th, 1877; W. G.; male; aged 45; married; three children; occupation, farmer. No insane relations.

Cause of attack unknown. Has worked hard, been successful, and temperate in habits; never sunstruck.

On the evening of the day he was received, he suddenly became maniacal in his fury, and knocked down three patients before he could be restrained. Was put in a restraint chair, but soon twisted himself about so that his head was down on the floor, and his legs over the back of the chair. Was removed to his room and restrained upon a strong mattress, where, in spite of all precautions, he continually tried to strike his head, Bell. 3d hourly. November 6th, pulse 100, temperature 99; pupils but slightly dilated. Says that he is in no pain. Is drowsy and stupid—Gels.[1] hourly. November 7th, pulse 132, respiration 40, temperature 100; pupils large and not easily changed. November 8th, pulse 129, temperature, 102; teeth clenched; continually trying to get head down; pupils large and fixed; will drink only milk; semi-conscious. November 9th, pulse 129, temperature 102. Restless. More talkative. Tongue thickly coated yellow. November 10th, pulse 104, temperature 101; talks rationally at times, and again incoherently; sees objects in the air, and on the walls; has many delusions; teeth thickly coated with sordes; hands in constant motion; complains of headache; sat up for short time; milk and beef tea. November 11, pulse 108, temperature 102; mentally the same; physically stronger: slept one hour. November 12th, pulse 100, temperature 101; pupils respond to light, but not normally; incoherent; slept two hours. November 13th, pulse 108, temperature 101; slept three hours. November 14th, pulse 100, temperature 99, respiration 28; he lies in an apathetic condition; Bapt. tinct. hourly. Seven P. M., pulse 96, respiration 19, temperature 102; his bowels have been constipated, but has had three movements within the past twenty-four hours. November 15th, pulse 92, temperature 100; has had two (2) movements; toast water; Rhus tox[1] hourly. November 16th, pulse 76, temperature 99; one movement; sleeps some during the day.

From this time he continued to improve, and, although he occasionally had periods of fleeting excitement, his friends thought best to remove him in the latter part of December, and he finished his recovery at home.

CASE SECOND.—Admitted July 14th, 1880; J. D. B.: male; age 40; married; three (3) children; occupation, farmer. Had an uncle who was peculiar. Cause of attack attributed to overwork and sunstroke. From his history it seems that he had been working hard to free himself from debt, and had worried considerable over the matter; this, with exposure to the sun, brought on the attack for which he was admitted. As a matter of interest to those who know but little regarding the methods sometimes pursued in getting a patient to an asylum, permit me to give the course pursued in this instance, remembering that it is not an isolated example. Whatever may be said of abuses carried on within the walls of asylums, the inhuman efforts of relations and friends too frequently surpass the supposed inquisitorial cruelties of the typical asylum attendant, according to popular idea.

The day on which this patient came was exceedingly warm. On leaving home he had been excited and had so frightened the three strong men who accompanied him, that they placed him in the bottom of an express wagon, and retaining him in that position by sitting on him most of the

distance of forty miles over a rough country road. The patient's condition on entering can be better imagined than described. An exhausted man, covered with bruises and abrasions, for whom no medical skill could avail, was what in his case was presented to us for treatment.

During the night of the 15th he slept none. In the morning he was kept in bed and beef-tea and milk given in alternation every three hours during the day and night. Very restless, pules 120, temperature 104; tongue thick and red on edges, brown in centre—Bapt. tinct. hourly. July 16th, slept none; pulse 90, temperature 105; tongue red and clean; skin hot and dry, bowels constipated; patient restless; hallucinations of sight; follows with his glances imaginary objects about the room; keeps his hands moving in circles over his head and chest; will occasionally answer questions. July 17th, pulse 132, temperature 106; tongue brown and coated, and cracked transversely; food eructated; answers questions and then relapses into delirium; bowels have not moved; injection given; refuses food and is fed every two hours—Ver. vir. 1st hourly; this was followed during the day by Bapt. tinct. 8:30 P. M., pulse 132, temperature 107½; quiet and semi-conscious; 11:40 P. M. died.

The post mortem, made the next day, revealed nothing that indicated the severity of the attack aside from a general appearance of dryness of all the organs and viscera. An ounce and a half of serum and blood escaped on opening the skull. The membranes were not adherent, but the grey matter of the brain was of a more reddish tinge than normal.

During the course of this disease the bowels are generally constipated and frequent enemas have to be administered. It is a question of some degree of importance whether or not during the increased temperature, enemas of tepid water should not be given often and with regularity so that the intensity of the fever may be diminished.

The improvement in the case first mentioned appeared to commence when the bowels began moving freely. In the second case, although when admitted the patient was in a weakened physical condition, obstinate constipation was present, and enemas were given only when no movement occurred in twenty-four hours. The typhoid symptoms increased in severity until they terminated in collapse.

In the treatment of acute delirious mania the utmost care must be observed that the patient in his fits of violence does not injure himself or others. For this reason the skilled care to be found in an asylum is most to be desired; for the patient can then have constant attention, and with baths, regular diet and medicine the chances of recovery may be greatly increased from what they would be at home.

The pathological condition of the disease is probably that of a meningitis and a limited or general arteritis. The remedies most to be thought of are Acon. Bapt., Bell. Gels., Rhus. tox. and Vir. V. But as each case may present certain symptoms calling for other drugs, I will not needlessly prolong the list.

XL.

Metastasis as a Cause of Insanity.

By C. Spencer Kinney, M. D.

By metastasis, we commonly understand a change in the seat of disease. Surgeons have long since recognized the fact, that healing a chronic ulcer or suddenly arresting a long continued discharge, as well as the amputation of hemorrhoids in persons who have a predisposition to phthisis, places the patient in serious danger of some grave disease of the lungs.

The treatment of rheumatism, by external application, has led to pericarditis and pleuritis in so many cases that metastasis is now a fact beyond question to those who have carefully watched the result of such practice. According to some, skin diseases have also been a source of metastasis as a sudden suppression of eczema capitis has resulted in meningitis. In eruptive fevers, if the eruption is not permitted to run its course, various affections are developed within the hidden recesses of some internal organ in the form of meningitis, catalepsy and hydro-cephalus acutus. In all these cases there must be some predisposing weakness, some organ that stands ready to become involved on the slightest ground, for when such a condition does exist, it requires but little impetus to start a train of pathological symptoms upon its course. Inflammation that is checked in one part goes to that portion that stands nearest to it in weakness, and whether resulting in simple congestion or the breaking down of tissues the change is soon made manifest. By many, this may be passed over as a mere complication having no connection whatever with the abatement of any previous difficulty but with these metastases never occur and their very existence is too often denied.

While the subject of metastasis as a cause of insanity has been but little touched upon, yet it comes in as one of the many causes that directly or indirectly has brought the sufferer to our haven. Dr. Batty Tuke drew up a classification in which he gave seven classes of insanity and twenty-nine sub-classes. The seventh he called metastatic insanity, with the subdivisions of rheumatic, and from healing of long established issues. As yet no case has been admitted to this asylum with rheumatism as an important factor in its history. Such cases, however, do occur and the reason of this seldom being found in institutions for the insane may be that they usually terminate suddenly. While we would naturally suppose by reasoning from analogy, that a transition from the endocardium or pleuræ to the arachnoid would be the most natural, owing to the anatomical similarity of these membranes, yet carefully made post mortems at the Hotel Dieu, respecting this point, yielded no evidence of any inflammatory change having taken place. That the cessation of rheumatic symptoms has been followed by brain disturbances is evident that they are connected, and whether we accept the statement that no change in the brain structure could be found, and rest content with the idea that it must of necessity be a neurosis, yet the fact remains, and the same care

has to be exercised as in anticipated metastasis. Respecting complications arising from skin diseases, the most enduring effects are to be found in children, where the result, if not of a meningitis, is a dwarfing of the intellect. Of this class there have been several admitted, the form being dementia. Two of these cases I here give:

J. R. H., aged 49; single; predisposed to insanity. When eight years old had scarlet fever, since then has been imbecile.

C. M. S., aged 37; single; slightly predisposed; had scarlet fever when one year old, and since then has been imbecile, with delusions at times that his brother is trying to injure him. Alternating insanity with skin diseases has occurred, the mental difficulty lessening as the eruption spread, and increasing as the skin trouble disappeared, this occurring with uniform results. One occurred with puerperal mania that is so interesting from a clinical point that it is here given:

Mrs. S. E. A., aged 22; married; one child; no insane relations; disposition amiable and refined. During her first pregnancy, had an eruption, probably an eczema, which disappear under the application of some kind of an ointment. Following the confinement came puerperal mania with which she was brought here. After remaining about seven months, and recovering she returned home, when she again became pregnant, and again the eruption appeared. This time she was under treatment of a homœopathic physician who cured her by the internal administration of Arsen. She then went through with the confinement, and manifested no symptoms of insanity. Here we have every reason to believe that had the seat of disease again been changed by external application some form of insanity would have come out on her second delivery. She had but shortly recovered from the effects of the first and the same influences, baring the method of treatment, were present during her second pregnancy and confinement.

In that form of insanity arising from healing of long established issues, the general conditions of the internal organ may be good, while the patient may possess some tendency toward some nervous difficulty. In these cases as has been previously stated, the weakest portion becomes involved, and in this way the brain and nervous system comes in for its share. Of this class the case of a man, now here on his second admission, presents some interesting features, as well as the case of a woman suffering with phthisis.

(1.) Mr. D. S., aged 59; farmer; had a brother who shot himself. For about five years previous to his first admission he had been troubled with a varicose ulcer on his left leg that occasioned him considerable annoyance. During this period his family noticed that whenever his ulcer improved and gave evidence of healing he became irritable and overbearing in disposition. This occurring at intervals during the five years. When he was admitted he was suffering with melancholia, and the ulcer healing slowly. After two months under treatment he was discharged recovered, his ulcer being entirely healed. This recovery was of brief duration, for within a year he came down with a most violent attack of acute mania, and at present is under treatment. The question arrises whether it would not have been justifiable to have promoted a discharge of the ulcer on his first admission, and to have kept it up, although he is now improving

under treatment, and may eventually recover from the present attack as well as the effects of the stoppage of so long a drain upon his system.

(2.) Mrs. M. C., aged 26; married; four children; mother was extremely nervous. When she was admitted, had been suffering with catarrhal phthisis for several years, and had a history of night sweats, expectorations thick and yellow, hæmoptysis, headache in morning, palpitation on least motion with cough. When the above symptoms were better, she grew violent and excited, but as long as they continued she was quiet. These conditions alternated for the first four months she was here, when the phthisical symptoms moderated and she went into confirmed dementia with occasional excitement. Such is the history of a few of the cases that have come under our observation. While the number is not great, it may serve as a nucleus about which others may cluster, and though happening unfrequently, yet the interest of the profession is to have such cases grow still less, so that no one may feel he has been the remote cause of retarding or checking the growth or life of a human mind.

XLI.

Effects of Climate on the Insane.

By A. P. WILLIAMSON, M. D.

During the past year it was my good fortune to have visited Europe. When passing through the large cities I always endeavored to call at the insane asylums situated in the vicinity. After examining the various asylums in England, France and Germany, and comparing those with institutions of the same nature in our own country, I was struck with the widely different appearance and actions of the insane in the several countries. After ruminating over several reasons for these apparent differences, I came to the conclusion that they were largely due to the effects of climate.

In England where the atmosphere is in a perpetual haze, and always more or less damp, the insane seem to partake of the same dull and heavy condition, and we find them unexcitable and easily managed.

The superintendents of English asylums tell us that they are never obliged to use the straight-jacket, or in fact any mechanical restraint applied to the body to control patients, but find that placing the violent one in a padded room is a means sufficiently quieting for all practical purposes.

This warm, moist atmosphere seems to be favorable to the development of insanity, as we find by statistics that England has a greater per centage of lunatics than any other country in the world; but the degree of violence in the cases is milder than in most other lands.

How very different are the insane in England from those in sunny France, where they are blest with plenty of blue sky, and cool, dry, exhilerating weather. Here the patients are lively and gay, and seem to enjoy to a certain extent the fag-end of life; which is all that is left to them. They do not sit down on the ground and endlessly count their

fingers, but are constantly up and doing, even if their occupation is mischief. Thus they give evidence that they have not entirely lapsed into dementia or lost their claim to the fact that they are still intellectual beings. I am compelled to state that the straight-jacket, and all other methods of restraint known in this country, and some which happily we know nothing of practically, are here all in use; and are, I am convinced, brought frequently into requisition when not absolutely necessary.

Still, the inmates of asylums in France seem happier than those of England; this no doubt is due to the fact that they spend a great portion of each day out of doors, basking in the glorious and health-giving sunshine.

In Germany, where there is such a coarse climate, we find the patients duller than those of France, and more morose and vindictive than the insane of England. Here we find many cases of chronic mania with homicidal tendencies. The methods of restraint are also modified, they do not use the mechanical restraints, so called, but in place of these, they confine patients in large padded chairs, and the violent ones are here held by attendants until the attack of frenzy has passed; or the excited patient is placed in a dark unpadded room until quiet.

In our own country we have, so to speak, a cosmopolitan climate and all ranges of temperature. We have also representatives from all parts of the world among the inmates of our asylums for patients. Hence we have both a greater variety of patients than any country on the other side of the Atlantic, and also a more diverse climate.

American insane patients differ from the inactive patients of England, the vivacious French, and the morose Germans. We find here a commingling of all these characteristics. Our insane have the combined but modified qualities of those in foreign countries. To treat them successfully we are obliged to use some restraint, in order to secure the more rapid recovery of the patient; and also to prevent injury to himself or others. But I am happy to state that the amount of restraint is being gradually more and more dispensed with, and even now in this country we rival in moderation, and skillful care, those foreign lands where alienists are always preaching against America, and her formidable measures for restricting the victims of insanity. The methods which we use are not so revolting as those employed in England and Germany where the so-called non-restraint system is practiced. Think of placing an acute mania case in an unpadded, cement-lined dark cell, situated in the cellar of the building, as they do in the Gottingen Asylum in Prussia; where the patient in striking at or defending himself from imaginary foes, is constantly bruising, cutting or otherwise mutilating himself.

How very different is this practice from that of placing a patient in a light but stout canvas comisoll where he cannot injure himself or others. And yet the assistant physician in the Gottingen Asylum endeavored to convince me that the non-restraint system as used in that asylum, was far superior to the restraint of the American asylum.

Again climate at the seaside seems to be very beneficial to those suffering with acute mania; this is probably due to the soothing influence that pervades the salt air. Sea bathing is also an important factor in the treatment of recent cases of mania. Everybody is conscious of the soothing and calming effects of a bath in the ocean, and how rapidly it allays

irritability and blunts our over sensitive nerves. Thus we find in the cases of these poor sufferers that they often fall into a delicious sleep after such a bath to awaken a new man.

Mountain air, on the contrary, seems to have a stimulating, exhilerating and inspiriting effect. We see the results of living in these regions, in the bold and happy manner of those who dwell therein. The hardiness and good spirits of mountaineers are proverbial the world over. This clear and bracing atmosphere is useful for those suffering from melancholia. In the mountains there is not so great liability to continued fogs, protracted rains, and too rapid changes in temperature as in the valleys, and consequently among the hills, in an atmosphere of perennial purity man's physical and mental functions are performed in the most physiological manner. And here it is, therefore, that a poor creature afraid of his own shadow, or one who is constantly expecting to be fed to snakes, or who is wedded to some powerfully depressing delusion, is raised far above himself and mental troubles, and soon finds his fancies rapidly disappearing in this refreshing air, as the fog is dissipated by the gentle sun's rays of the morning.

The question may be asked, why sea air is good for mania and mountain air for melancholia? We can only answer by stating that experience, the great teacher, has proclaimed and vindicated the fact.

We do not wish to be understood to state that mountain air is not under any circumstances of benefit to some cases of mania, or sea air to melancholia, but in the light of results from practical trial, we believe that, as a rule, excitable patients should submit to the rude caresses of old ocean if they would wish to speedily recover, while the victims of melancholia should seek returning happiness and exuberance of spirits upon the peaks of the everlasting hills.

XLII.

The Utility of Medical Diversity.

BY TITUS L. BROWN, M. D.

It is quite natural in times of independent scientific freedom of thought, for the modern braver medical investigators to disobey the old customs and rules of practice in order, if possible, to arrive at better results and thus prolong human life.

Absolute obedience is continued stagnation, and usually sustains tyrannical ignorance, and dogmatic error. Honest records of diversified experiment confirm the truth of all useful methods or laws in medicine. The utility of high or low dilutions of remedies depends upon a faithful comparison of the results gained by their repeated, tested use. The fact that no two patients are equally sensitive to the same potency of a medicine, shows the utility of views held by extremes and exclusives. Self-constituted "pure physicians" of either extremes have many of them settled

into dogmatic ebony hardness of mind, impervious to instruction from those who naturally differ from them in consequence of early emphasized dictatorial medical teachings.

An independent and brave investigator tests and records his experience and results, to be compared with past observations, while error drops out to make room for truth in its natural progress.

Without diversity and disobedience there could have been no advancement in knowledge, no liberty of expression or progress.

For each new medical fact in mind there is a corresponding new fact in matter; forms united and used to sustain health of body and correct thought.

By the homœopathic method of diluting and triturating remedies before using them as agents in the cure of disease, we have increased the healthy coalescence of the atoms and molecules of the fourteen elementary substances which are necessary in the healthy composition of the human body. Motions necessary in the reorganization of tissue and wasted organs of the body seem to be sustained by the use of attenuated remedies, while the crude compounds may be used to sell out the patient to the undertaker, the marble worker and the cemetery.

When we historically contrast the nearer approach of the two opposing schools of medicine, and observe the better feeling and courtesy with which physicians of both methods of practice now timely meet each other to save the life of some poor sufferer, we more fully realize the harmony of educated diversity and the social progress and utility of carefully comparing educated differences, without the blindness of partizan zeal.

Give us more of quiet, calm observation and experience, in place of unnecessary strife and arrogant dictation, then the extreme medical opposites will find their utilitarian position. If there is one custom better than another, we should sustain independent of the variety of views in our school of medicine, it is, we think the individual privilege of testing that form of remedies the mind of the physician forces upon his attention as best for the patient under treatment.

Intelligent disobedience and freedom of manly discussion sustains the truth of all systems, while it vanquishes error from the minds of those who have become petrified teachers of medicine.

Progress is the disobedient child of an old and disobedient parent whose wisdom has united the extremes in the work of exchanging experiences in order to find the evoluted truth in both, and for both schools of medicine. When continually out of each others society, both extremes run into a rut of egotistical self-righteousness, and mentally kick in their own darkness at an absent diversity likeness.

Where can you find two physicians of any school who would not be both lazy and hypocritical, if they always agreed on every medical question; neither having the courage to state their own experience for fear of an intellectual war. All the medical facts or useful truths in medical progress are not held by any one faction or school of medicine. A selfish partisan seldom advances. The right never appears so well as when fairly contrasted with the wrong. It is a fact the extremes in full comparison does greatly help us to intelligently choose the right from the wrong; or at least take a middle and safer course. Radical liberality with correct

records of observation and experience, presented at each medical meeting, will mutually increase and faithfully distribute the needed wants of medical errors and dictatorial retrogression. Experience, wholly of a personal and unselfish character is safer and better than any partisan testimony. It is wiser to test before indulging in wholesale condemnation, even the highest or lowest dilutions of remedies.

The most uncertain thing in life is human testimony, when controlled by pride, dictation, avarice and fear.

XLIII.

Surgical Cases From Practice, With Comments.

By E. CARLETON, JR., M. D.

Harry S., aged 17, contracted syphilis, which made its appearance in the form of chancroids. Thenceforward the outward manifestation of the disease was rapid. The young man was alarmed, but feeling ashamed to face his family physician, he applied to a quack, who administered a vile draught and promised a speedy cure. Matters went from bad to worse for about three weeks, when, thoroughly frightened, he summoned me March 14th, 1879. I found the penis enormously swollen, about two and one-quarter inches in diameter, livid, phymosis partially acquired; phagedenic ulcers upon the edge of the prepuce and far back upon its inner surface; also upon the glans, profuse, thick and ichorous pus. Worse than all the rest, three fistulous openings into the urethra, all dribbling urine when it was voided. The fistulæ were in and near the raphe, near each other, and communicated with the fossa navicularis and anterior portion of the urethra. Of course micturition caused intense agony. The impure connection, rapid onset and destructive course of the malady, and the character of its action left no question of diagnosis. I had to deal with soft chancres. What should be done? The patient had always enjoyed good health previous to this attack. From my knowledge of him and his family, I believed him to be free from all chronic miasms. That being the case, all the complications with which we are obliged so often to contend were eliminated, and I was left free to grapple with the syphilitic poison alone. So far *Mercurius* was indicated according to the law of similars. In addition there were the following symptoms: white-coated, large, flabby tongue, showing the imprints of the teeth; nightly fever, and free perspiration excited by slight muscular exercise, this confirmed the choice of the remedy.

I gave one grain of Mercurius Sol. H., first centesimal trituration, four times a day, and directed the young man to cleanse the parts with warm water three times a day, to prevent the accumulation of pus; to wrap the penis in soft linen smeared with mutton tallow; to maintain the recumbent position; and to eat lightly. Then I kept a sharp lookout. In a few days the ravages of the disease had abated somewhat, and he was instructed to take his medicine but three times a day. By the last

of March there was better color, and from that time there was general improvement visible. Consequently the drug was given in the second degree of strength, grain doses, thrice daily. By the last of April the ulcers had healed, the tongue was nearly right, and the fever had subsided. The fistulæ showed improvement too, and urination was tolerable. After that he received only two doses of medicine a day, morning and evening. One week later, the drug was raised to the third degree. The middle of May two of the fistulæ were healed, and the third nearly so. Then I gave him a powder at night, only, until the last of May, when he seemed well in every respect. That ended the matter. There has been no relapse, no aggravation, no other involvement up to the present time. He is in perfect health.

Mr. W. G. R., a down-town merchant past the meridian of life, always enjoyed good health, with the exception of an occasional slight attack of indigestion from error in diet. One day he noticed "two little sore places like fever blisters" he says, beside each other upon his lower lip, which he pricked with a needle, supposing he should let out a little matter thereby, to be followed by quick healing. Instead of that, however, the bad places enlarged, coalesced, a broad, thick crust formed, and the lip swelled and turned livid. He then came to me—December 11, 1879—and I found that he had malignant pustule. No history of inoculation could be elicited, unless the needle were at fault. He steadily grew worse, the swelling and discoloration involving the lower part of the face. The lip was tender, circumscribed and hard. He said that the lip felt like an attached weight, lifeless and heavy. Occasionally a sharp, burning pain was felt, and the application of heat was agreeable. He could not sleep well at night, and especially from midnight to morning. He had some thirst but not characteristic. There being no question of the remedy, I gave him Arsenicum two-hundredth, in water, a teaspoonful every hour. To favor the desire for warmth we resorted to the flaxseed poultice, mixing it large, hot and moist, and changing as soon as dry or cool. By these means the disease was kept thoroughly under control. For three days the treatment was persevered in, while the indications remained unchanged. The swelling became prodigious, the crust attained a size of a quarter dollar, small openings appeared externally and internally, only liquids could be swallowed, and yet the patient was able to sit in a chair a short time every day. Slept some, and no typhoid symptoms developed. I was obliged to leave the city for a short time, long enough for a scare, because the lip was no better. The result of this was, that on the 15th day of December, Lachesis third, in water, was given every hour for twenty-four hours. At the end of that time, I reappeared upon the scene and found trouble existing. The lip was almost black, shading off on the face to a light color; pulse quick, wiry and feeble; great prostration; foul, liquid stools, followed by hemorrhage of dark blood; no sleep; restlessness before midnight. Here was a quandary. Should I go back to *Arsenicum ?* the remedy which had yielded good results, or prescribe for the mixed drug and natural disease symptoms as I found them. The modality of the restlessness decided me, and I gave Rhus. tox., two-hundredth, in water, a teaspoonful every hour. Next day, December 17th, a slight improvement could be seen. We kept to the *Rhus.*, length-

ening the intervals between doses as improvement advanced. Soon the crust sloughed off, giving vent to thin, ichorous pus, which also discharged from the inner openings. By January 1st, 1880, as near as I can learn from my notes, the lip had healed with small scars, only slight swelling and tenderness remaining. He still had a coated tongue with pulse about 80, easily increased to 100 by slight exercise. Soon after this, I allowed him to take a short drive in a close carriage. There was never after that any halt in improvement. A walk of two blocks to my office invariably ran his pulse up to 100, till three days ago, when 85 was the *maximum*. He then seemed quite well. Some of his friends assure him that he had no malignant pustule, for in that case he surely would have died.

COMMENT.

Mercurius low was given to the first patient because there was no psora or other complication, and the unmistakable indications for the drug, rendered the test which ensued desirable. By diminishing medicine in proportion as improvement advanced, no aggravation was caused and a speedy cure resulted. This case demonstrated the needlessness of local medication to soft chancres of the most destructive character. Also the power of a drug which is similar in its action to a natural disease, to cure important organic lesions—notably the fistulæ.

The second case demonstrates the power of high potencies in acute disease of the most deadly nature, as the patient was thoroughly under control when the proper remedy was given, in high potency, and rapidly became worse when under the influence of unsuitable medication; it also shows the unwisdom of abandoning the similar remedy when it controls the constitutional or subjective symptoms; at the same time corresponding to the objective symptoms, just because it does not prevent the development of that local morbid anatomy, which the natural history of the disease in question leads us to expect will follow; it also proves that the remedy which is similar to the totality of the symptoms, will finally yield the best local results, when compared with other methods of treatment.

XLIV.

Unusual History of Fatty Tumor.

BY E. CARLETON, JR., M. D.

Mrs. T., aged 50, a patient of Dr. J. P. Ermentraut, is correctly represented by the photograph, Oct. 17th, 1879. It developed from left *labium majorum*, and was first noticed eighteen years ago, about the size of a pigeon's egg. Four years later it had attained the size of a hen's egg. Patient (probably on account of pride), asserts that the tumor remained at that size until six weeks ago, when it rapidly assumed its present proportions, then hardened, and then ulcerated on its anterior surface, as shown in the picture. The putrid ulcer impelled her to show it to Dr. Ermentraut. Pedicle soft. Measurements—six and one-half inches long,

thirteen inches largest circumference, pedicle six inches in circumference.

Removed October 18th, 1879. Incision through skin and superficial fascia of pedicle at its upper extremity; dissected upwards about three-fourths of an inch, till completely beyond the tumor, the parts being very vascular, and hemorrhage delaying the operation somewhat. To remove the tumor required the division of much connective tissue, and numerous blood vessels; therefore passed a strong double ligature through them, divided it and tied each half firmly, then attempted to amputate with wire ecraseur, a short distance below ligatures, but the wire broke repeatedly, and after spending much time at this, cut the mass away with the knife, it weighed twenty-seven ounces, and section proved it to be a fatty tumor. In consequence of ligatures and the crushing by ecraseur, there was but little hemorrhage from the stump. Stitched integuments, dressed with dilute *Calendula.* Removed stitches three days after. Dr. Ermentraut conducted the after treatment, he says he "applied *Calendula* four days, when it commenced to smell very fetid." [Ligatures allowed to slough out with stump.] "Then I used *Carbolic Acid* fourteen days, when good granulation commenced and I used *Calendula* again to the time it was all healed, which was between Christmas and New Year. About two (2) weeks after the operation several ulcers of the size of a dime appeared on the face and fore-arms, which I considered metastatic. For these she had *Arsen.* 3d, two days, followed by *Sulphur* 3d. They healed promptly, and her health has been good since."

XLV.

On the Immediate Cure of Hemorrhoids by Paquelin's Thermo-Cautery.

BY M. O. TERRY, M. D.

I do not presume to enlighten any physician or surgeon in reference to the value of Paquelin's Thermo-Cautery. What I say is simply confirmatory of what has been written. For the theory of how it produces favorable results, the various diseases, as sciatica, spinal irritation, progressive locomotor ataxia, carcinomatous growths of the cervix uteri, &c., in which it has proved curative, and for explicit instructions in reference to the mode of applications I can do no better than refer you to the following articles:

The Thermo-Cautery in Obstetric Surgery, by S. W. I. Joseph, Esq., published in Braithwaite's Retrospect, June 1877.

Note on the Immediate Cure of Piles, by H. A. Reeves, Esq., in the same number.

The Use of the Actual Cautery in Medicine, by E. C. Seguin, M. D., in the Archives of Medicine for June 1879.

The Thermo-Cautery in Disease, by H. B. Millard, M. D., published in pamphlet form. (1880).

The operation for the immediate cure of hemorrhoids may be performed without an anæsthetic as the pain from the puncture is but trifling. It is the most painless of the various surgical methods, and you can assure your patient that the relief will be speedy and the cure permanent. Generally I operate in my office, the patients being able to return to their respective vocations. The operation is simply this: The patient lying on the side, the legs flexed well up to the abdomen, the tumors are brought into view by an anal speculum if high into the rectum. The conical point of the instrument being heated to a *dull red heat* it is passed to the base of the tumor and quickly *rotated out*, for should it be *pulled out* a portion of the eschar will be liable to come away with the instrument, causing hemorrhage; should this accident occur, it can readily be controlled by the cautery. In fact with the cautery we have a hæmostatic of great utility. I have not considered it necessary, as has been recommended, to give a half grain suppository of Morphia after the operation, and one-fourth of a grain daily for two or three days, followed by an enema and a laxative on the succeeding morning. I, on the contrary, have the bowels moved freely before the operation and kept regular by a mineral water afterwards.

I prefer this operation from the fact that the operation is more quickly performed; the cure is more speedy; there is no secondary hemorrhage; nothing is removed, and there need be no fear of abscesses, fistulæ or stricture.

XLVI.

The Surgical Treatment of Hæmorrhoids.

By W. L. M. FISKE, M. D.

A disease which is so common that nine-tenths of the adult human family have more or less traces, and with which every physician is familiar in his daily practice, does not require in the present paper any lengthy or minute description.

Neither shall I enter into the medicinal treatment, premising that the cases operated upon have had the full benefit of homœopathic medication, and received all the benefit to be derived therefrom; leaving a tumor of organized tissue, a perfect nuisance in itself, and a breeder of manifold ills.

Mr. Squire divides hæmorrhoids, or the tumors which grow at the verge of the anus, into three kinds.

FIRST.—Those which depend on enlargement of the veins at the extremity of the rectum.

SECOND.—External hæmorrhoids formed by the enlargement of the thin skin and subjacent cellular tissue at the verge of the anus.

THIRD.—Those which consist of a vascular development of the mucous membrane, constituting tumors much disposed to bleed, when protruded from the anus.

What may be designated as the *true* external or venous hæmorrhoid

answers to the first of Mr Squires' sub-division, and is connected with a dilated and varicose condition of the hæmorrhoidal veins, the branches of which are visible through the thin integument near the anus.

These tumors may remain for months without being other than a nuisance, when from over-straining, prolonged standing or other exciting causes they become suddenly congested, a coagulation of blood occurs in one of the varicosities, and a small, firm, hard tumor is formed external to the anus. Inflammation then takes place in and around the swelling, accompanied often with severe pain and prolonged suffering. If not relieved it will go on to suppuration, and if the tumor is large, often leaves a fistulous opening which will not heal unless slit open like an ordinary fistula. The quickest and a perfectly safe way to treat an external hæmorrhoid when in this condition is to slit it open, allowing the coagulum to escape and the tumor shrivels up leaving a simple fold of skin. This procedure anticipates nature, doing quickly what is accomplished slowly by the suppurative process. There is no danger of hemorrhage, as there is simply a spurt of blood and the cut surface being exposed is easily controlled.

The discharge of the coagulum leaves the little cyst with a smooth lining, evidently the inner coating of the dilated vein.

It is best to make the incision on a line radiating to or from the anus, and not transversely, as it heals more readily. Under no circumstance apply a ligature to an external pile as it creates intense suffering and often constitutional disturbance making a tedious and doubtful cure, often resulting in a fissure of the anus.

If a case occurs where it is thought best not to operate, measures must be taken to subdue the inflammation, and in addition to the many remedies enumerated in the books, the Ferric Phosphate, as recommended by Schussler, should be remembered, as it has in my hands fully carried out his predictions of its usefulness in venous congestions.

As a local application, the continued use of ice directly to the inflamed tumor affords grateful relief. When it cannot be procured the use of tobacco poultice continued even up to nicotism are often of great service; but the only permanent, effectual treatment for these swellings, or the loose folds of skin that are a resultant of these inflammatory attacks, is their removal by excision. The fear of hæmorrhage is fanciful, the swelling or fold of skin, whichever it may be, is siezed by a pair of forceps, and with a pair of heavy scissors, or with what is better the serrated scissors, the growth is cut off—in a line radiating toward the anus, being careful *not to cut within the sphincter;* a fissure being the probable result of a violation of this rule.

During the operation the local application of the ether or rigolene spray, keeping the parts operated upon thoroughly frozen, freedom from pain is secured, and for this minor operation which any physician need not hesitate to perform, answers every need of an anæsthetic.

The internal or true hæmorrhoid more fully meets the nosological condition, as a flow of blood is one of its characteristic symptoms.

Situated above the sphincter muscle and covered by the mucous membrane of the bowel, they consist of hypertrophied mucous membrane and sub-mucous tissue, containing a very copious network of blood vessels.

The effect upon the constitution of patients suffering from internal hæmorrhoids differs is a remarkable degree; Richarand mentions a merchant who lived to the age of eighty-nine years, quite free from infirmity, and whose good health, was ascribed to periodical bleedings from piles, during fifty years of his life; the evacuation being very regular, and so profuse that the blood was thrown some distance, as from a vein opened in phlebotomy.

Liewtand mentions a person who lost three-quarts of blood in the course of a couple of days, and both Arius and the celebrated philosopher Copernicus, thus bled to death.

I have observed that women afflicted with bleeding piles are much more liable to pernicious anæmia as a resultant, than men; probably due to the superadded loss during menstruation.

The different operations for the radical cure of this variety may be classed under four heads. Ligature; ligature, or clamp and excision, medicinal injection, and forcible dilatation of sphincter ani. Variations of each form were and are practiced by different surgeons. The same preliminary steps are to be taken for all these operations, first thoroughly evacuate the bowels, and then (with the exception of the forcible dilatation method), give a large warm water enema, and get the tumors thoroughly forced down and protruded. Give anæsthetic in all forms except medicinal injection.

Sirs Everard Home and Benjamin Brodie laid down the rule, and verified it by large experience, that external piles, which are covered by the skin, *ought not* to be removed by ligature but by excision, on the other hand, internal piles, which are covered by the mucous membrane, ought *for the most part* to be removed by the ligature.

The excision alone of internal piles is liable to be followed by dangerous hæmorrhage, and was abandoned by Brodie, Astley Cooper, Synie and Petit after losing one or two patients apiece, yet the occasional loss of a life did not deter Dupeytren and other French surgeons from practicing it.

As the four methods named are so much safer I do not consider excision alone, as an operation to be thought of even for very small tumors.

There is probably no operation in surgery that affords so much relief, at so small a cost of suffering and risk, as the removal of hæmorrhoidal tumors with the ligature, so says Sir B. Brodie, having operated on between two and three hundred cases, he "conceives that this is not only one of the most effectual, but one of the safest operations in surgery." He was cognizant of two fatal cases, one from diffused inflammation, and one from pyæmia; he contends, therefore, that the operation is as safe as any can be expected to be, and that the chances of danger are so slight that they need not be calculated. Since Sir B. Brodie's time the elastic or rubber ligature has come into use; its advantage over the old resisting ligature being first, no necessity of drawing the ligature so tight, thus producing less pain, secondly the contraction of the rubber following up the strangulation, sloughing is more rapid and complete. Under the second form Holmes says "I have now performed this operation in upwards of two hundred cases, and I can with truth state that if it be properly done there is hardly an element of danger in it, having operated at all

ages from puberity up to nearly eighty, and in instances of the utmost severity, in cases where the tumors have been immense, and when the patients have been as thoroughly blanched by long continued bleeding, that one would not dare to perform any operation unless convinced of its absolute safety. Not having met with a single instance where secondary hæmorrhage has followed the operation." Holmes also lost two out of this number making the same success with the clamp excision and cautery that Sir B. Brodie did with the ligature alone.

The use of the hypodermic syringe, injecting Carbolic acid into the substance of the tumor is said to be original with Dr. J. M. Mitchell, of Clinton, Ills. This method of treatment has in the hands of a great many, according to published reports, been wonderfully successful over every other procedure. It has this advantage; that if carefully performed the patient need not be prevented following his or her daily avocation. The precautions to be taken are, first, not to have the solution too strong, (one part of acid to ten of oil); second, to inject slowly and but a few drops, not over ten for any sized tumor at one time, and lastly taking special care not to allow any of the medication to escape and be distributed upon the *outside* of the tumor. This operation has to be repeated every ten or fifteen days until the growths are entirely obliterated; really making the operation and cure more tedious than the knife or ligature, but having a certain amount of charm for those who dread the *idea* of *cutting*.

To illustrate the need of following the above rules at the risk of being thought prolix, I will give a little personal experience.

Having operated in this manner a number of times successfully, and reading an account in a journal, where the use of equal parts of Carbolic Acid and Glycerine was very efficient in an operation, I used the formula on a patient afraid of the knife, injecting three large tumors, two internal and one external, promising a speedy cure and no confinement after the second day, (Sunday); the results were startling, intense pain for some hours, followed by acute inflammation and sloughing of all three, confinement to the house for two weeks, but a perfect cure; hereafter I shall follow the three rules I have laid down for others, when operating with the hypodermic.

The forcible dilatation of the sphincter ani for the cure of hæmorrhoids has also been remarkably successful, and some enthusiastic operators claim as positive results as is accomplished in the same procedure for fissure of the anus. This is accomplished by first etherizing the patient, introducing the thumbs of the operator into the anus and dilating the sphincter until the muscular fibres can be felt giving away under the force used; and in all cases it is a safe and proper adjuvant to or finish of an operation when the patient is anæsthetised.

The use of Nitric Acid instead of the actual cautery, after the excision of an internal hæmorrhoid, has in my hands so far been perfectly satisfactory.

Small tumors can be entirely cured by simply penciling the growth with the strong acid which seems to shrivel up the growth and produce re-absorption of the tissue the same as the Carbolic acid does by injecting *in* the growth.

When there are large tumors the use of the ivory faced clamp is the

best form for securing the tumor and the surrounding tissue against accident during operation, but where it is not convenient this method will answer admirably; having brought the piles well down as directed for all these operations, isolate one tumor pass one or two strong straight needles close to the base, then tie a firm whipcord ligature around *back of the needles* cut off the tumor in *front* of the *needles*, apply the strong Nitric acid to the cut surface, pull out the needles if you have not already cut them out, snip off the ends of ligature close to knot, oil the stump, and return with the sphincter, always operate on the internal piles before cutting of the external ones, if there are any to be operated upon.

The use of the clamp is easily understood and handled; securing one tumor at a time, after finally compressing with the screw, the same steps are followed. After the Acid has been applied, gradually loosen the clamp, if any points bleed, apply more Acid, and return stump as previously directed.

Keep the patient on light food and quiet for a few days, move the bowels by enema at the end of a week if they do not move naturally and easily. Use such measures and remedies to prevent a new development, and as Brodie says of the ligature, no element of danger enters into the consideration of the operation.

XLVII.

A Case From Practice.

By W. M. L. Fiske, M. D.

A young man aged 19, well developed physique, an active member of an athletic club. On New Year's day he handled two hundred cases of hats, each weighing seventy-five pounds, first raising and resting the case on right knee, then carrying to right shoulder, then throwing it up on the pile above. Being in a hurry he worked rapidly and became very much heated, was seized with a chill that night followed by high fever, and severe pain in bowels. I was summoned on the morning of the 2d of January, and found him suffering severe pain over the whole abdomen, no distension but great tenderness, clean tongue, clear head, pulse one hundred and twenty, temperature 103.8, diagnosed diffused peritonitis. Ordered hot flaxseed poultices, with Acon. and Verat. Virid. alternately every half hour. Jan. 3d pulse 90, temperature 103.5, continued same remedies.

Jan. 4th pulse 90, temperature 103, less tenderness, tongue clean and red, flighty the greater part of the night, though easily recovering when spoken to—a great deal of thirst, gave Rhus., evening temperature 102.5.

Jan. 5th, pulse 84, temperature 101. Omit poultices. Continued Rhus.

Jan. 6th pulse 84, temperature 101.5.

Jan. 7th, tenderness almost entirely gone, can move from one side of the bed to the other without help, sitting up in a chair while bed is made,

morning and night head, perfectly clear, says he is almost well pulse 84, temperature 100.5, since the 4th have kept him on milk entirely no stimulus or solid food.

Jan. 8th pulse 84, temperature 101.5.

Jan. 9th pulse 84, temperature 101.

Jan. 10th pulse 84, temperature 101.5.

Jan. 11th, had a slight chill in the night with some tenderness in the right hypochondrium, some stiffness of back, but no tenderness in iliac fossa, pulse 84, temperature 100, ordered chloroform and glycerine locally, continued same remedy and expressed uneasiness about the symptom of tenderness and stiffness.

Jan. 12th pulse 86, temperature 101.

Jan. 13th pulse 84, temperature 101.5, a decided Hippocratic countenance, examined carefully for any indication of pointing to either a psoas, or lumbar abscess, but could find none.

Jan. 14th, I was called up at 3:30 A. M., found the patient in a collapsed state, but perfectly conscious, had slept comfortably until 2:30 A. M., when the nurse heard him spit a few times, this continued until I saw him. When I entered the room, I noticed a peculiar odor, asked if his bowels had moved, answered not within an hour, examined bed, it was perfectly clean; examined the washbowl, he was spitting into, which had a peculiar fetid, but not fecal smell, he was spitting every ten or fifteen seconds as a tobacco chewer would, and about same quantity of a thin whitish mucus. His bowels had moved regularly so that I could not decide upon intussusception, or a concealed strangulated hernia. In fact I did not know what to think, but one thing I knew, and that was if my patient did not get immediate relief, he was a dead man—believing that death was inevitable and very near, I sent for my friend, Dr. H. Willis, with the full determination that with his co-operation I would cut through the lumbar muscles and hunt for pus. In the meantime I gave a hypodermic injection of Brandy, forty drops, as the pulse was not to be counted. This was repeated at 6, and 8:30 A. M., and before the doctor reached the house at 5:20 A. M., the necessity for an operation was over, as the patient began to *spit pus* and continued to do so until 10:30 A. M., having expectorated about a pint, with relief of tenderness in right hypochondrium. It was discharged through the right lung, the left being entirely free from rales.

He died on the 18th of pneumonia.

Post mortem. The left lung, pleura, heart, stomach and liver, normal. Right lung had both red and gray hepatization through its whole area, with adhesions to the pleura, posteriorly, at which point it is probable the pus passed into the lung tissue, as the pleura had about half a teacup of pus in its cavity; with direct communication with a psoas abscess, which had burrowed up and back of liver, through the diaphragm instead of down to the thigh or groin. The sack of the abscess still contained a full coffeecup of pus, with free pus in the peritoneal cavity besides. In looking up the literature of psoas or lumbar abscess, I can find none giving such rapid results, and only one chronic case mentioned in Helmuth's Surgery, last edition when the abscess burrowed upwards and discharged through the lung, thirty-six hours after the abscess had been opened in the thigh—producing immediate death.

XLVIII.

The Positive Recognition of the Peritoneum in Abdominal Operations.

BY WALTER Y. COWL, M. D.

The pleasure which an operator feels in knowing what he is cutting, in operations upon the abdomen, and the anxiety on the other hand with which he looks out for the peritoneum in cutting down upon an ovarian tumor, upon a hernia, upon a stone in the bladder in the high operation, more especially when he has not become well acquainted with its appearance from experience, are only commensurate with the danger of prematurely incising an ovarian cyst, of cutting a loop of intestine, or of unnecessarily wounding the peritoneum in supra-pubic lithotomy. This danger we believe is a serious one and directly measures the value of a positive test for the recognition of the peritoneum. If in ovariotomy for instance, we have adhesions of the sac to the abdominal wall, and in cutting down upon the cyst, strike one of these adhesions, and unaware that we have passed the peritoneum, suddenly cut into a thin walled cyst, (as has not rarely been done), allowing its fluid to gush over the wound we have made and to escape into the peritoneal covity on whichever side the adhesion happens to be incomplete, we have gone far toward rendering the issue of the case, a fatal one; first because of the risk of peritonitis which is run, in thoroughly cleansing the many folds of the mesentery; a peritonitis, which resulting from the great exposure of the sensitive peritoneum, unaccustomed to contact with the air, and the consequent evaporation of moisture and loss of heat; secondly, the risk of leaving some of the fluid to decompose and set up peritonitis and septicœmia, the two great causes of death after ovariotomy. Again, if a loop of intestine, or a portion of the omentum or transverse colon, should be bound down by adhesion at the point of incision, as is sometimes the case, it becomes imperative to know when the peritoneum is reached and cut through.

In the operation for strangulated hernia, if we discard the fine distinctions with regard to the seven different layers, which I believe all operators do in practice, and I might say of necessity do, more especially when inflammation is present, how much safer one can feel in cutting down, confident in the possession of a test for the membrane, which it is here so important to recognize, and how much less liable, to cut the gut which is so frequently adherent, or to mistake a gush of grumous fluid from the sac, for a portion of the intestinal contents. Lastly, a test for the peritoneum is valuable in preventing an inexperienced operator from industriously separating the membrane from its normal attachment, in the belief that he has cut through it, and is breaking down extensive adhesions. This has occurred more than once in the practice even of experienced surgeons.

In speaking of the incision for ovariotomy, text books either say that the peritoneum will be found just behind the muscular wall, or else do not specify the tissue lying immediately over it. This latter, it seems to me, is an important omission, while the former statement certainly is not

true of many cases. Since my attention has been called to the point by a supra-pubic operation for stones in which a thick layer of fat lay between the peritoneum, and the abdominal muscles, I have noticed the presence of sub-peritoneal fat in six four cases, operative and post-mortem, in two of these the patients were possessed of no more than the ordinary amount of adipose.

The point is a practical one! A clump of simple adipose tissue, may easily be mistaken for a fat omentum, and becomes a cause of considerable mental anxiety and delay until its real nature is made out. But the knowledge of its occasional presence here, coupled with the assurance which a certain test for the recognition of the peritoneum gives, enables the operator at once to decide the nature of the tissue, and to continue his incision. We will now proceed with the description of this test.

Upon the outer surface of the peritoneum, or rather as forming a tough *protecting* basement membrane, is located a layer of minute bundles of white connective tissue fibres, running generally in a transverse direction, while crossing each other individually at very acute angles, and thus forming a more or less reticulated tissue, very different from any other found in the abdomen. These bundles of fibres are of varying size, but always less than one-twentieth of an inch in width, and often very minute. The entire layer also varies greatly in thickness in different individuals, and in different regions of the abdomen, being most marked and distinct between the pubis and the navel, where strength is most needed. If not possessed of much thickness, clear meshes occur between the lines of white, and thus bring to view the translucent homogeneous membrane proper of the peritoneum. The general transverse direction of the fibres, suggests identity with the fascia transversalia, with which, however, it cannot be identical for two reasons, viz.: First—It is not to be easily nor entirely separated from the membrane proper of the peritoneum in normal cases, even when unusually thick, thus showing it to be a part of the peritoneum, which fact is also proved by the presence of sub-peritoneal cellular tissue to the outside of it, (*i. e.*, between these fibrous lines, and the posterior muscular aponeurosis), as shown by the presence of fat in the cellular tissue. Secondly—the fascia transversalis is intimately adherent to the posterior aponeurosis of the muscles at and near the median line, (Quain) which this tissue is not, but is separate from it, and in some cases, as before remarked, with fat interposed. This reticular fibrous structure of the peritoneum has been found over the whole parietal layer of the peritoneum in ten cases of post mortem. In not one case where they have been searched for, have the white lines of the peritoneum, as we may call them, been absent. Moreover, upon exposing the peritoneum, their recognition is not difficult; it takes but a glance to see them plainly. They have been found alike over normal and diseased peritoneum. In a post mortem examination of a patient with double ovarian tumor, (each weighing about seven pounds), with universal adhesions, in whom the peritoneum had been increased to nearly one-eighth of an inch in thickness by prolonged inflammation, they were readily recognized and used as a guide to prevent incising the cysts.

In conclusion, we may merely enumerate the operations in which these

little fibrous lines are valuable as a guide, namely: Ovariotomy, herniotomy, supra-pubic lithotomy, colotomy for artificial anues, cholecyslolomy or incision of the gall bladder, nephrotomy, gastrotomy for any cause, such as invagination or twists of the intestine, inversion of the uterus, removal of the ovaries, and suppurative perityphlitis or perityphlitic abscess.

XLIX.

Clinical Cases in Surgery.

By N. Osborne, M. D.

CASE FIRST—What was it? Mary B., aged ten years, while going to school, fell and injured her right knee—it gave her severe pain for some minutes, after which she continued on her way. For the succeeding ten days she continued her attendance at school, although most of the time complained of uneasiness and pain in the region of injury. Aften this time her knee began to swell and pain her very much, so that she was obliged to remain at home confined to her bed. Soothing applications were applied to the limb by her mother for some two weeks without any benefit except in a measure to quiet pain. I was then called to see the case for the first time. Her general condition presented the appearance of great emaciation, anæmic, pulse 160 per minute. No appetite, fretful and peevish in the extreme. On removing bedding to examine limb, I was much surprised, in size I had never seen anything approaching it. The limb from the knee down was not materially enlarged, but from knee extending to body, was greater in bulk and size than the body. Measurement at knee twenty-eight inches, thigh at body thirty-three inches, appearances red and shining, and by palpation, positive signs of pus or fluid was perceptible. Taking the nature of injury into consideration, and her general condition, I had no hesitation in pronouncing the accumulation pus—and expressed my determination to give free access to same. I found over the region of inner condyle of femur a spot which seemed softer and more prominent which was selected for the place of opening.

I accordingly made a moderately free incision, and to my utter surprise instead of pus, pure arterial blood spurted from the wound reaching nearly to the ceiling and continued to flow, in spite of all efforts on my part, until patient swooned from the loss of blood. Taking advantage of this condition, I closed the wound by the aid of adhesive plaster, and then gave my attention to restoring patient from swoon. This I accomplished in about twenty minutes. I visited my patient daily during the following week, when she died. I could not induce the parents of this girl to consent to a post mortem examination, consequently a positive knowledge as to the morbid condition of the parts was not obtained.

This to me was an interesting and unsatisfactory case, and I have reported it hoping some one of great experience could unravel the mystery.

CASE SECOND.—Martin B., forty-five years of age. Blacksmith by occupation, of exceedingly fine physique, kind husband and father, except when under the influence of liquor which he periodically indulged in. While in this condition he became extremely pugnacious and abusive, especially so to his own family. On the occasion of which I write, he became entangled with his eldest son in a discussion over some subject, and being in that condition when new ideas are not easily received, he became very abusive, and in retaliation the son no doubt thinking he should be made more susceptible and pliant, hastily pulled a portion of plank from the sidewalk on which they were standing, and gave the subject of this sketch a blow on the head with sufficient force to fell him to the ground. He was carried into the house by this filial son, assisted by neighbors where he lay for several hours in a stunned condition. A surgeon was subsequently called, who discovered nothing but a simple incised scalp wound, located over the left parietal prominence, about two and a half inches in length, which he washed and dressed. Two or three subsequent visits were made by the surgeon, when he discharged the patient, stating he would be well in a few days. The third day after this surgeon's withdrawal from the case, he began to complain of pain in the head, for the first time since the receipt of the injury—difficulty of articulation, and staggering when attempting to walk. A second surgeon was called in who discovered nothing unusual, ordered some lotion with which the wound was to be washed, as it was then discharging quite a large amount of pus.

He also expressed the opinion that a few days would see him around again, assuring him there was no cause for alarm. After waiting a week and no improvement occurring, I was sent for—found right side partially paralyzed; inability to converse without dropping several words in a sentence; staggering as if intoxicated.

I carefully examined wound, which had healed with the exception of a small opening—discovered nothing so far as external appearances could disclose for the unfortunate condition presented by my patient, but decided there was a compression of brain from some cause, and that his only chance for recovery lay in trepanning. This he very reluctantly consented to submit to, and two days after he was placed on table under the influence of Chloroform, incision made in scalp, sufficient for the purpose of operating, when I discovered a small black spot a trifle larger than the head of a pin, which I touched with my scalpel, giving a metallic sound. I then with my thumb nail loosened it slightly, when to my utter astonishment a portion of a ten-penny nail, two inches long, was produced, followed by a gush of pus, in amount I should judge, one tablespoonful—here then was the cause of compression. The incised flaps of scalp were restored to position, patient soon came out from under the influence of the Chloroform, improvement set in at once—all abnormal conditions disappeared within forty-eight hours, and ten days from the time the nail was extracted patient resumed his business. This case is interesting in showing the length of time a foreign substance may remain impinged in the substance of the brain without producing death or permanent anatomical lesions, just one month having elapsed from the receipt of injury until the nail was extracted. It is also interesting in showing

the tardiness of alarming symptoms and the rapidity with which they disappear when cause is removed.

It also teaches a moral lesson to belligerent sons, viz.: never to use a piece of plank for chastizing pater-familias without first observing whether it contains ten-penny nails. The lesson to the father has been decidedly salutary, he having utterly refused to again touch that thing which indirectly nearly cost him his life, and made his son a murderer.

L.

Hypertrophy of the Prostate.

BY THOMAS D. SPENCER, M. D.

There are few diseases more common and none capable of entailing greater suffering upon mankind, than that pathological condition known as "Hypertrophy of the Prostate."

It is a disease peculiar to the aged, ofttimes rendering the declining years of the old man full of pain and sorrow.

It is this relative frequency and consequent suffering that makes this disease of so much interest to the physician, whose mission it is to alleviate the ills of others. A thorough knowledge of the anatomical and pathological conditions presented, becomes, therefore of the greatest importance to the practical physician. It is my purpose to present this interesting subject in as concise and practical a form as possible, hoping that the effort, perchance imperfectly performed, may not be entirely devoid of interest. That this disease is not of recent origin, and that the ancients possessed a considerable knowledge as to its treatment, is evinced by the fact that very good specimens of lead, copper and bronze catheters, possessing the long prostatic curve, have been found among the ruins of Pompeii. As to the extent of their information we know but little. During the middle or dark ages, little progress was made in genito-urinary surgery, and it was not until the early part of the nineteenth century that in the general revival of medical science, all along the line, this subject forced itself upon the profession. At that time renewed impetus was given to this branch of surgery by the laborious efforts of Civiale, Hunter, Cooper and Cline. At the present time there are many eminent specialists in the field, among whom are Sir Henry Thompson, of England; Zeissl, of Germany, and among our own countrymen are VanBuren, Bumstead, Otis, Gonley and others.

ETIOLOGY.

Little can be said as to the cause of hypertrophy of the prostate. Our present limited knowledge will not admit of definite statements, in regard to its origin. Several hypotheses have been presented, among which are excessive venery, urethral stricture, gonorrhœa, and sedentary habits. Unfortunately for these theories, many of the worst cases of prostatic hyper-

trophy are found among old men, who have led active as well as chaste lives. This affection rarely occurs before fifty-five years of age.

The laborious researches conducted at Greenwich Hospital, would seem to show that twenty per cent. of all prostates over sixty years of age are hypertrophied. Sir Henry Thompson in his excellent essay upon "Diseases of the Prostate," (which obtained the Jacksonian prize in 1860), asserts that moderate enlargement existed in thirty per cent. and marked enlargement in eleven per cent. of all the cases examined.

ANATOMY.

The prostate is a pale, firm glandular body, placed directly in front of the neck of the bladder, which it surrounds, together with the first half of the urethra. Its apex is directed forward to the deep perineal fascia, while its base projecting backward, is in close relation to the rectum, to which it is attached by loose areolar tissue.

It resembles a horse-chestnut in shape, and is enclosed in a firm, dense, fibrous capsule. In weight it varies from four to six drachms. The approximate diameters are antero-posterior, one and one-fourth inches, transverse, one and one-half inches, and depth three-fourths inch. The prostate is tunneled in the median line by the urethra, which passes near its upper surface.

In rare cases it lies deep within the prostate, in close relation to the rectum, which is liable to be wounded in lithotomy, under these circumstances. Laterally the ejaculatory ducts perforate the prostate obliquely, upward and inward, emptying into the prostatic urethra. In structure the prostate is a racemose gland. Henle considered it as divided into three distinct portions, first, the internal sphincter of the bladder, formed of unstriped muscular connective fibres, consequently involuntary in action; second, the external sphincter formed of striped muscular fibres, voluntary in action, and finally the body of the gland. The yellowish fibrous tunic, which envelopes the prostate sends off into the glandular substance, numerous diverticula which form a massive framework, between which the glandular elements are situate. These are composed of numerous follicular pouches, opening into elongated canals, which join to form from twelve to twenty secretory ducts. These canals are surrounded by a muscular coat, and lined with columnar epithelium. The secretion of the prostate has been thought by Krans to possess the important function of maintaining the vitality of the spermatozoa, which in absence of the prostatic fluid cannot live in the uterine mucous cavity.

PATHOLOGY.

The prostate may hypertrophy symmetrically, or it may be irregular in form. In the former case it presents a smooth, rounded, oval tumor, varying from an English walnut to a hen's egg in size, and in weight from one to several ounces. Cases are recorded in which the prostate weighed nearly three-quarters of a pound, this, however, is exceptional, for it rarely attains the size of a small orange. Velpeau suggests an analogy between the prostate and the uterus, as regards muscular tissue, both organs having a tendency to produce fibrous tumors after middle life. On section the internal structure often rises considerably above the surrounding cut surface, as though it had been compressed.

Ofttimes one lobe will be enlarged, while the other remains nearly normal in size, in this case the urethra will be contracted to a vertical slit, pushed one side of the median line at the same time becoming elongated and tortuous.

The free surface is usually smooth and rounded; cases, however, occur in which there are as many as three or four little lobes projecting into the bladder, their action being similar to that, of the ball and socket valve so commonly seen in Davidson's household syringe. That part of the prostate most frequently hypertrophied is the posterior median portion, forming a third lobe, according to some anatomists; this is incorrect, as normally the prostate consists of two lateral lobes, separated behind by a deep notch, the "so-called" third lobe, never existing in its normal condition. In hypertrophy of the prostrate this "third lobe" is often present, extending upward and backward in front of the vesical neck, forming a dam, as it were, to the free outflow of urine.

This obstruction calls for constantly increased efforts to enable the bladder to expel its contents. As the voluntary muscles increase in size when subjected to constant use, so with the walls of the bladder, at each laborious effort of micturition, the longitudinal and circular striæ of the muscular coat, become enlarged, congested, and project into the vesical cavity. This continues until the bladder walls become enormously thickened; cases are on record where they measured nearly an inch in thickness.

As the bladder contracts, its mucous surface becomes roughened presenting longitudinal rugæ that are red, vascular and irritable; now it becomes extremely intolerant of urine, seeming to the patient as if it were filled to bursting, when only containing a few ounces. As after a time the blacksmith's arm ceases to increase in size, even though he continues to use it; so with the bladder, a time at length comes, when the hypertrophy reaches a point beyond which no further growth can take place. At this period in the progress of the disease, the bladder begins to dilate. The muscular fibres are now unable to completely empty the bladder, after every attempt a few drops of urine are left behind, the temperature of the body soon causing decomposition. Through the action of mucous as a ferment, the urea by the addition of two equivalents of water, is converted into ammonium carbonate thus: $CH_4M_2O + 2H_2O = (MH_4)_2CO_3$ which gives to the urine its ammoniacal odor and alkaline reaction.

The Carbonate of Ammonia now acts as a new irritant, increasing the catarrhal inflammation, thereby producing a fresh supply of mucus, which again acts as a ferment.

At this period of the disease, owing to some imprudence, such as wetting the feet, sitting on damp earth, or intemperance, inflammation is superadded to the previous congestion, swelling ensues with complete retention as a result. After a few hours of rest accompanied by the usual domestic remedies, the urine is again made to flow, but in the meantime the muscular coats have been weakened, the bladder dilated, and partial atony has been the result.

This we can readily comprehend when we consider how often the surgeon paralyzes the sphincter ani, by stretching, for the purpose of operating within the rectum.

This retention is repeated from time to time, leaving a larger amount residual urine upon each successive occasion; each attack leaving the bladder in a more helpless condition than before.

Post mortem examination often reveals a sacculated condition of the bladder walls, within which may be found calculi, nearly filling up their cavities, but prevented from escaping into the bladder by the restricting necks.

A well known authority states that "stone is the logical sequence of obstruction to urinary outflow." As the urine becomes alkaline, the phosphates are deposited and become glued together by mucus, thus forming a nucleus upon which layer by layer of calcareous matter is deposited, producing stone.

It now becomes incumbent upon us to consider the effects of this long continued increase of urinary pressure upon the kidneys. The observation of the uncomplicated results of hydraulic pressure within the kidney is possible in only a small proportion of cases, as death is usually caused by nephritis, due to the inflammation extending backwark along the ureter to the kidneys.

The earliest effect observable is an overgrowth of the interstitial connective tissue, most marked around the malpighian bodies. This is succeeded by a gradual absorption of the pyramidal structure due to pressure; the whole of which may ultimately disappear, the situation of each pyramid being marked by a deep hollow formed by the expanded calyx. In more advanced cases the cortical substance may also degenerate, and become absorbed, the remains being enclosed in a dense fibrous capsule, forming the sacculated kidney of pathologists. The results produced by this increase of pressure in the urinary tubules, may therefore, be said to be, the induction of a chronic interstitial nephritis, accompanied by a gradual absorption of the structures of the kidney, commencing with the pyramids, and gradually extending to the cortical substance. As the secretion of urine is in a great measure dependent upon the difference of pressure, between the blood within the malpighian tufts, and that of the urine in the tubules, it would be diminished to a dangerous degree, were it not that the pressure in the former, is somewhat increased, by the slight obstruction to the venous circulation, caused by the new growth between the latter. Now, if the obstruction to the escape of urine be completely removed, as by the regular introduction of the catheter, the chronic cystitis will subside, the bladder assume its normal proportions, and all pressure within the kidney structure cease.

The cause of irritation being thus removed, a process of cicatritial contraction of the new growth between the tubules sets in, and the form known as cicatritial kidney is produced.

CLINICAL HISTORY.

The patient is rarely able to date the first appearance of the disease, its approach being so slow and insidious. The first symptom usually noticed is a slight weight in the perineum, accompanied by a dragging sensation, and some tenderness, so trivial in character, as scarcely to attract notice.

The old man does not pay much attention to his urinary functions; they have always been good servants, performing their duties well, why should they not continue so? He may observe that it takes a longer

time for the urine to start, that the current is not as forcible, and that while the main stream is projected some distance, a portion drops vertically to the ground. The "coup de piston" is often imperfect, that is the spasmodic contractions of the accelerator urinæ may be insufficient to completely clear the urethra. The urine afterward dribbling into the patient's clothing. He shrinks from acknowledging his weakness, even to admit that he is growing old; he has learned that it is best to leave to nature the working out of her own cures; surely this slight difficulty will pass away. Thus does the old man reason with himself, while the disease creeps on apace.

After a time sleep becomes disturbed, the patient is obliged to rise once or twice during the night to micturate; night after night this is repeated, gradually growing worse until slumber is broken, perhaps every hour, by this constantly recurring desire to "make water."

Disturbed of the rest so essential to health, and worn out by these frequent painful micturitions, the patient grows irritable, peevish, loses appetite and ages rapidly. Retention now sets in, adding a new complication to the disease.

In spite of his utmost efforts, the urine refuses to flow, the suffering grows intense, the brow is bathed in cold perspiration, the pulse rapid and feeble, while the tongue becomes dry and coated. The agonized patient hesitates no longer, and with the assistance of a surgeon finds relief, but in the meantime, the bladder has become dilated, and its muscular walls left in a partially paralyzed state.

After every act of micturition a quantity of urine is left behind, which increases week by week, as the prostate hypertrophies, thereby obstructing the free outflow of urine. The slightest excesses bring on retention, each attack leaving the bladder in a more sacculated condition, until in some cases, it habitually contains many ounces of urine, which is constantly dribbling away, rendering the patient a burden both to himself, and his friends. The above description represents a typical case, to which there may be variations; thus sometimes the lateral lobes become enlarged, while the median portion remains normal; in this case there is no obstruction to the flow of urine, and but little "residuum." Under these conditions, there is great irritability, marked cystitis, with constant and uncontrollable desire to pass water. The bladder hypertrophies at the same time, contracting until it will scarcely tolerate an ounce of urine. Such cases are truly deplorable, as the utmost efforts are insufficient for relief.

DIAGNOSIS.

With these symptoms before us, a mistake in diagnosis would seem well nigh impossible, but there are other similar morbid conditions, from which it must be differentiated; among these are chronic cystitis, urethral stricture, stone and cancerous growths within the bladder. When a man over fifty years of age comes to his physician, complaining of difficulty in passing urine, accompanied by straining and considerable pain, suspicion should at once fall upon the prostate.

In making examinations of this kind, it is better to follow a prescribed routine, thereby acquiring greater dexterity, as well as insuring a more methodical investigation. The following arbitrary steps are those gener-

ally employed by myself: First—Place the patient upon his back, in the lithotomy position, a firm flat surface is preferable. After oiling the index finder, introduce it well into the rectum, with the palmar surface upward. If hypertrophy exists, a firm dense lobular body will be anteriorly felt, in close relation with the rectum, in place of the usual soft elastic body, hardly discernible except to the skilled touch. In some cases the two lobes can be distinctly felt, while in others the finger can only distinguish a rounded tumor, pressure on which produces pain, and an urgent desire to urinate. Pass the finger above the prostate, if possible, hooking it around its upper surface, thereby gaining an approximate idea as to its size and general character. The condition of the bladder should also be noticed, as to the thickness of its walls, and general elasticity.

Second.—The patient should now be requested to urinate, after which the surgeon should introduce a full sized metal catheter, (No. 12), of the ordinary curve, this will pass readily into urethra, until it reaches the hypertrophied prostate, which juts up in front of the vesical neck. If after a few cautious manœuvres, the catheter still refuses to enter the bladder, it should be carefully withdrawn. On no account should force be used, patience and gentleness will be all sufficient. The old man is nervous, he dreads the use of instruments, and the least appearance of violence will not only irritate the urethra, but may render the patient refractory. Select another with an extra long curve, known as "the prostatic," and again endeavor to enter the bladder; a flow of urine will announce the success of this attempt.

Sometimes a soft flexible rubber catheter will pass through the tortuous windings of the prostatic urethra. Squire, of Elmira, has devised a flexible metalic catheter that will sometimes find its way through the prostatic urethra, when all other means have failed. The patient who believed his bladder to be empty, will be unable to suppress his astonishment at seeing a pint or more of urine flow through the catheter. It is a favorable symptom to find a large amount of residual urine, for under these circumstances the patient may be taught to pass the catheter himself, since by keeping his bladder from overfilling, he can avoid his most disagreeable symptom, continual recurring desire to urinate. In some cases the lateral lobes will hypertrophy, while the median portion remains normal, in which case there is no obstacle to the out flow of urine, no residuum, and no dilitation, the group of painful symptoms being due to inflammation, irritability and contraction of the bladder. These are caused by the long standing congestion, produced by the pressure of the enlarged prostate on the bladder, thereby interfering with its venous circulation.

Third—The bladder should be carefully searched for stone. This to me seems to be a point that cannot be too carefully considered, for if there be a stone, it must necessarily act as a foreign body and all our treatment come to naught unless it be removed. The judiciously selected remedy will often abate the vesical irritability to such an extent, that the operation of lithotomy may be safely considered.

TREATMENT.

At the present state of our medical knowledge, we must regard hypertrophy of the prostate as incurable; that is, we have no remedies adequate to remove the prostatic tumor after it has once formed.

There are cases, hovever, recorded, in which the hypertrophic growth has been retarded, and in a few instances, an absorbant action induced within its parenchyma. Although we cannot remove the hypertrophy, a great deal may be accomplished by the way of palliation. The vesical irritability, and consequent frequent micturition, the constitutional cachexia, the degenerative changes in the parenchyma of the kidneys, may all be materially relieved by the use of the appropriate homœopathic remedies. For the convenience of description, the treatment will be considered under two classifications: mechanical and medicinal.

MECHANICAL TREATMENT.

The foregoing description of the structural changes occurring within the bladder, the atony and dilatation of its walls, and consequent large quantity of residual urine, readily suggests the "key" to the surgical treatment, viz.: the regular systematic introduction of the catheter. The catheter is the "natural specific," if we may so speak, for the relief of the symptoms produced by this morbid condition. The reason why the patient is obliged to urinate so frequently, is not owing so much to the irritability of the bladder as because it is never completely evacuated. Now, if by any means, we place in the hands of our patient the power to perfectly expel the urinary contents, we immediately relieve his most urgent and annoying symptom—constantly recurring desire to urinate.

Thus at the very outset, we have accomplished a great deal, and placed the patient's system in such a condition as to more readily respond to our remedies.

Therefore, as a first step in the treatment, he must be furnished with a soft, flexible, rubber catheter, and carefully instructed in its use; this should be introduced night and morning. There arises a question in the treatment of these cases, which demands careful consideration: "At what time and under what circumstances should we recommend habitual catheterism for a patient, whose hypertrophied prostate prevents him from emptying the bladder by his own efforts?" In answering this question there are two facts relating to the local symptoms which must be observed in order to arrive at a correct conclusion in any given case.

First, we must note the quantity of unine habitually left in the bladder, after the patient has expelled all he can by his own efforts. Second, observe the degree of frequency with which he passes water, especially during the night.

In regard to the first particular, if the amount of residual urine exceed eight ounces, the patient should at once commence the daily use of the catheter, though often a much smaller quantity will require this operation. It has been said that "as long as the urine is clear, no matter what the quantity retained, no instrument should be employed." At first glance, this theory would seem plausible, but a more thoughtful investigation proves it to be untenable, for is it not better by the early use of the catheter to prevent cystitis, than to wait until this distressing complication sets in? If by this means we have prevented an inflammation of this already old and incompetent bladder, everything has been gained. "An ounce of prevention is worth a pound of cure."

If there is a large secretion of muco-pus the bladder should be washed

out with tepid water every day. In those rare cases where there is no residuum, but great irritability, the patient urinating as often as every thirty minutes, the nature of occupation being such that he cannot always quickly relieve himself, he should be provided with a rubber urinal, several varieties of which are now manufactured. In some instances, which happily are exceeding rare, a stage at length arrives, when the bladder becomes so contracted and intolerant of urine, that the use of the catheter becomes necessary almost every hour, day and night; a condition of extreme misery to the patient, as it entails loss of rest, fatigue and injury to the canal, by these repeated catheterizations. In this advanced stage of hypertrophy, the patient seems to exist for little else than the purpose of passing the catheter. This stage is almost the certain prelude to the death of the patient.

Sir Henry Thompson has devised an operation for the purpose of placing a tube permanently in the bladder, making an opening above the pubis for this purpose. He has applied this operation only in extreme circumstances with the view—in which he has succeeded—of rendering the short remains of the closing life tolerable.

MEDICINAL TREATMENT.

It hardly seems necessary to assert the uselessness of attempting the removal of the hypertrophy by constitutional remedies *per se*. All that can be accomplished by way of absorption, will be done in giving those remedies which cover the similimum of symptoms presented during the course of the disease; allowing sufficient time for each remedy to produce its full effects, being in no great haste to change a well chosen one. Among the principal remedies most efficacious in this disease, are the following: Agnus castus, Amm. mur., Ant. crud., Arsen., Cann. sat., Canthar., Coloc., Graphit., Lycop., Mercur. Natr. mur., Silicea, Pulsat., Sulphur and Terebinth.

LYCOPODIUM.

Severe backache, relieved by passing urine. Frequent desire to urinate, pains worse at night while lying down. Turbid milky urine, with an offensive purulent sediment, cystitis disposition to calculi. Must wait long before urine will start. Urine scanty, dark red, deposits a red sandy sediment, hæmaturia. Jerking, cutting in the urethra after urinating.

SILICEA.

Constant desire to urinate, which discharges by drops, with much burning in the urethra, worse at night. Pressure from the prostate forward while urinating, nocturnal incontinence.

SULPHUR.

Urine fetid, with greasy looking pellicle on it, symptoms aggravated by local use of water. Painful desire, with discharge of bloody urine, requiring great effort. Redness and inflammation of the orifice of the urethra.

TEREBINTHINA.

Pressure within the bladder, extending up into the kidneys, when sitting, disappearing when walking. Urine scanty, bloody, looks like coffee grounds. Frequent urination at night with intense burning, tenes-

mus of the bladder, strangury. Urine deposits a thick slimy, muddy sediment, odor like violets. Symptoms aggravated by living in damp houses.

As the limit already exceeds the length designed for this paper a more extended symptomatology of the above remedies is impracticable.

The patient should be thoroughly instructed in hygiene, the necessity of wearing flannals both winter and summer, and the protection of the feet from cold as well as from damp, should be impressed upon him.

The diet should be nutritious, but all stimulants must be avoided. To sum up the patient must be "temperate in all things."

The employment of the above means accompanied by a large share of patience, will do much to render the declining years of the old man not only comfortable, but comparatively happy.

LI.

Shock.

By J. G. GILCHRIST, M. D.

Among the many topics which command the attention of the surgeon, none perhaps is so little understood, even by exclusive practitioners of the art, as that which is placed at the head of this article.

By a singular habit of routine into which writers have fallen, one repeating the other with little variation, our text books will be found to contain exceedingly meagre reference to this important subject, and even our larger and more pretentious works have much to be desired. The writer having occasion to give particular attention to the consideration of shock, it is possible that something might be presented to this Society, which while perfectly familiar to the surgical practitioner, may only be acquired by those engaged in general practice at the expense of much reading. The condition is of such moment, that none can afford to be unfamiliar with the causes of shock itself, as well as the manner in which death is produced. The time usually allotted to the reading of papers will necessitate extreme brevity.

Shock is usually defined as a condition of suspended nerve action, due to powerful mental emotions, or briefly: Injury, characterized by more or less mental disturbance, lowering of the heart's action, with consequent pallor, and lowered temperature of the surface of the body. Prof. J. M. Carnochan, in his work on Operative Surgery, (part III, p. 86), gives us the most elaborate, and carefully considered essay on this subject that modern literature, so far as my information goes, contains. It has long been the custom to consider *shock* and *collapse*, as synonymous terms but our author (p. 87) says of it:

"*Shock* may be regarded as the source of the nervous symptoms that take place after the occurrence of an accident. Concussion being the first link in the chain of the consequent morbid phenomena, while the word

collapse should properly be used to express the extreme prostration of strength and the agitation and perturbation of the nervous system which follow upon all severe injuries." The learned author proceeds at great length to argue his proposition, but after careful study I find myself unable to accept his reasons for such a purely arbitrary classification whilst admitting that the primary and secondary symptoms are widely dissimilar if not actually totally different in expression. I shall, therefore, in this essay consider the terms shock and collapse as inter-changeable, while conceeding the fact that they may properly be used to indicate differing degrees of nervous prostration.

Shock is spoken of being primary or immediate, and secondary or remote. By the first we understand a case in which the symptoms appear immediately upon the reception of injury; the second refers to cases in which the indications are delayed for hours or even days. It frequently occurs that strong, vigorous men, are able by pure "force of will," to suppress or repress evidences of shock; until, weakened by loss of blood or confinement, the vital powers suddenly give way and extreme collapse occurs. Such instances are of great moment and gravity, inasmuch as the loss of moral tone, and the consequent lowering of vital resistance forbids any hope of spontaneous reaction. The symptoms and their intensity can rarely be forestalled by reference to the nature or extent of the lesion, nor the bodily condition of the sufferer, the most trivial injury is sometimes followed by the most severe shock, passing over into death, while severe injuries inflicted perhaps on those who are already weakened and debilitated from other causes, will not be accompanied by any such symptoms. It has been thought, and as far as my necessarily limited experience goes, with perfect accuracy that all things being equal, shock is more severe when injuries are sustained unexpectedly, particularly primary shock.

When the imminence of danger is recognized, there is an unconscious preparation of the mind and body for its reception, yet while primary shock may thus be avoided remote symptoms are more probable, and are dangerous just in proportion as the mental effort to prepare for the accident is greater.

This is one reason, I apprehend, why remote shock is of more frequent occurrence in military than in civil practice. It will serve our purpose as a brief introduction to the phenomena of shock, to state that the symptoms vary in intensity, from a momentary cardiac disturbance, to extreme mental and physical prostration, involuntary urination and defecation, syncope, delirium or immediate loss of life.

For the present we have nothing to do with *treatment* except to counsel great caution in the employment of stimulants, and will proceed to consider as fully as our limits of time will allow, the internal and *post mortem* appearances indicative of death from shock, and the causes of death under these circumstances.

It is the custom in our text books to state as a fact, that shock presents no structural change, sufficient to account for death; careful examination, however, will not bear out this sweeping assertion. Inspection of the bodies of those who have died from shock, have almost invariably shown, that while no structural lesion is observed, the heart and large venous

trunks are engorged with blood, which is either fluid or coagulated very imperfectly, the clots being loose and friable. This will indicate sudden arrest of the heart's action and a brief consideration of the anatomy of the parts concerned, should readily give an answer to the question propounded, as to the cause of death. The action of the heart is, to some extent, automatic, its direct nervous supply being inhibitory and regulating, rather than exciting and motor. This is readily demonstrated by the well known physiological experiment of removing the organ from the body, when done carefully and observing the continuance of irritability for an almost indefinite period, when kept in a proper menstruum, as artificial serum.

In fact, observation of chloroform narcosis, or the phenomena of apnœa, in which the heart's action is seen to continue for from four to ten minutes after the cessation of respiration, in short, after actual death—will give valuable hints as to the cause of death and as reasonable explanation of the phenomena leading to that termination.

The heart is supplied almost entirely from the ganglionic system, but receives a few fibres of the par vagus. This, of course, removes, to a considerable extent, the action of the organ from the control of the will. The lungs, on the contrary, are chiefly supplied from the cerebro-spinal axis, (the par vagus), but a few fibres are derived from the sympathetic. It is well known that the action of the two organs is in the proportion of one to four, but there is not perfect synchronism, the heart beating a little less, or a little more, than four times to one act of respiration. Now, taking two of the chief causes of death—heart or lung failure—which propably will be found by far the more frequent from all varieties of morbid action, we find that perfect synchronism in the functional act of the two processes, indicates the approach of death, whether through sympathetic or cerebro-spinal lesion depending upon the predominance of one function over the other. Thus the heart's action being vigorous and lung action progressively feeble, with synchronism in the action, we recognize cerebro-spinal conditions, the reverse of this would show sympathetic difficulty. LISTER & HOLMES, (Syst. of Surg.), explains the cause of death from Chloroform in this manner: That is, the primary effect of Chloroform being expended on the cerebro-spinal axis, as the artificial paralysis, (if the term be admissible), of this symptom becomes more complete, the functions of life are more and more entirely dependent upon ganglionic action. Now the sensory being purely of cerebro-spinal origin, its partial suspension exposes the individual to great danger from shock, and death oftener results from this cause, when Chloroform is administered, from insufficient anæsthesia; the lowered functional integrity of the nervous system, placing the patient in a condition in which direct action will readily extinguish life, which is barely sustained by the feeble influence exerted on the respiratory function through the sympathetic. Now in cases of traumatism, cerebro-spinal action being entirely arrested or paralyzed, by the force producing the injury, a further extension to the sympathetic, intensified and prolonged, by mental disturbance, and the withdrawal of the inhibitory influence of the par vagus, cardiac paralysis follows after a brief tumultuous exaggeration of the action of the heart. The amount of blood, thus collected in the heart, and the large contiguous venous trunks, is not sent to the lungs, or if so, from the fail-

ure in the pneumo-gastric is not utilized or oxygenated, and thus adding conditions of apnœa to those of shock. On the other hand profound mental impressions, as joy, fright or grief, may at once suspend the action of the sympathetic and the filaments of the pneumo-gastric, are incompetent to continue the action of the heart. Dr. H. M. Corey, of Waverly, New York, who was formerly my assistant in the University of Michigan, at my request made some very extensive investigations in this direction, and after arriving at the same conclusions that I had already reached, summed up as follows: "When we study the influence of these different sets of fibres in the heart's action, we shall see that they are very unlike indeed, for when we irritate the pneumo-gastric, the heart's action is diminished, while sympathetic irritation accelerates it. Now when the nervous system receives a severe shock from any cause, it produces excessive nervous irritation, the primary effect being great stimulation, which disturbs the equilibrium of the entire system, and allowing this irritation to be equally distributed to the heart, by the vagi and ganglionic systems it would seem at first sight that its action ought not to be affected in the least. But when we remember that the irritation is general and that the irritation of the vaso-motor nerves, reduces the calibre of the blood vessels, and in so doing accelerates the flow of blood to the heart, without compensatory heart's action, the cause of death in shock is, I think, satisfactorily made out." (Gilchrist's Surgical Therapeutics, p. 103.)

It is certainly unnecessary to add to what has been said, simply by way of illustration, as all practitioners of any experience can recall cases in plenty that will bear out the hypothesis above given. The term "hypothesis" is used with some mental protest as many propositions are placed in this category, that while incapable of actual demostration, necessarily assume the authority of fact. That the failure to enjoy a perfect conception of the pathology of this most important condition, is due to want of thought, seems evident. A few moments earnest study of the phenomena, and an intelligent interrogation of the symptoms presented must lead the student, it seems to me, to the same conclusions I have already reached. These may be summed up, that death from shock is due to cardiac failure, with apnœa as a more or less constant factor in the equation.

LII.

The Relation Between the Anal Sphincters and Diseases of the Anus.

BY H. I. OSTROM, M. D.

The lower end of the rectum is surrounded by a muscle which is in constant, though mild activity, but which either by local stimuli, or an exercise of the will, may be brought into violent and prolonged contraction. The effect of this contraction is two fold: First, the mucous membrane lining the bowel is drawn into tighter folds than naturally exist; second,

the levator ani muscle is called into action, and the long diameter of the rectum shortened. This physiological function, in itself not opposed to health, may become a source of trouble in disease, and tend to prolong the condition of which it is the cause. For reverting to the involuntary action of the sphincter muscles, it becomes apparent, that even this slight contraction will induce motion of the tissues in relation with the lower end of the rectum—the muscles being never wholly quiescent, so intimately are they connected with other muscles of organic life—and hence there is alternate contraction and relaxation. If to this normal action is added the spasmodic contraction which arrises from abnormal stimuli, a condition is created opposed to the rest so essential to the cure of a disease accompanied with loss of substance, the variety usually found at the margin of the anus. So long, therefore, as the sphincter ani muscle, I refer particularly to the external band, remains in a condition capable of contraction, a mechanical obsticle exists, which must be removed before a cure can be accomplished.

The diseases to which I desire to call especial attention, as being intimately associated with the anal muscles, are: Irritable ulcer of the anus and fistula of the rectum. These two diseases are situated, one inside, the other outside of a band of muscular fibres, and because of this situation, one is subjected to contraction, the other to drawing asunder of tissue.

First—Irritable ulcer of the anus. Let it be remembered that this is not a fissure, a crack in the mucous membrane of the anus, as it is sometimes considered to be, but is in almost every instance, a true ulcer, the shape of which becomes manifest when the fold of tissue in which it is situated is rendered smooth. Being an ulcer, it would naturally heal of granulation, and not by means of the union of one-half of its surface with the other half, but from the peculiarity of its position, in a fold of mucous membrane, so long as the sphincter muscle, which maintains the fold, remains intact, the physiological repair cannot proceed, hence the necessity of paralyzing the muscle, to relax tension and afford an opportunity for the ulcer to heal by granulation. This treatment becomes even more clearly indicated, when it is considered the part that the external sphincter performs during defecation, and it is noteworthy, as proving that it is not alone the passage of feces which causes pain in ulcer of the anus, that there is comparatively little suffering during stool, but when the sphincter muscle contracts, and the sensitive surface is again folded upon itself, the pain is felt in greatest severity, and is itself the cause through local irritation, of increased and continued muscular spasm. This spasm always accompanies irritable ulcer of the anus, and is sometimes so persistent as to render an examination of the rectum inexpedient, without the aid of anæsthesia, for not only does such an examination entail unnecessary suffering, but in some instances, when the disease is of long standing, the contraction becomes so firm, and the muscular hypertrophy so well defined, that a speculum cannot be introduced without larcerating the mucous membrane, a sequela to be avoided in conducting any examination. I have been led to regard these ulcers of the anus as not different from those ulcers which occur in the mouth, as the result of injury by the teeth or food; and at first a simple abrasion soon becomes an extremely sensitive

ulcerated surface which when situated at the lower end of the alimentary canal, is made additionally irritable by the passage of fecal matter, and the muscular contraction attendent upon defecation. The disease is primarily a simple solution of continuity, not deeper than the mucous membrane, nor does it involve other tissues, though of long standing. The intractable character of the affection arises from the reflex action which it excites upon the sphincter muscle, and the reaction of this muscle upon this ulcerated tissue.

Second—Fistula of the rectum, in anatomical relation, is the opposite of ulcer of the anus being situated outside of the sphincter muscle, and therefore subjected to different mechanical forces, traceable, however, to muscular action. The rectum is surrounded by areolar tissues, and in this rectal fistulæ usually occur; hence, an abnormal canal in this situation, would not be disturbed, save for this peculiar muscular arrangement of the neighboring parts. This arrangement requires that when the sphincter ani muscles are called into action, there being but one firm point of attachment for the external, and none for the internal ring of fibres, the structures in immediate relation with the muscle, are drawn away from their outer attachment towards the anus. From this will result the separation of the walls of any canal which may exist in the tissues surrounding the anus and lower portion of the rectum. If this fistulous canal penetrates the levator ani muscle, the parts are additionally prevented from uniting, because the fibres of the muscle, taking an oblique direction, will contract the canal when the muscle contracts, and relax and separate the walls, when at rest. The effect of this levator ani muscle upon this continuance of fistulæ is not sufficiently considered, but in deep fistulæ, this muscle retards healing quite as much as the sphincter muscles, and requires to be put at rest, at least that portion of the muscle which embraces the fistula.

The irritation induced by fistula is quite inconsiderable unless inflammation is present, therefore, the mechanical opposition to healing arises mainly from the physiological operation of muscles, and not from local irritation, so long, however, as this remains the cure is quite as uncertain as it would be if more severe muscular activity existed. So long as the structures through which the canal passes, are even gently moved, the parts will not heal. Stimulating injections may be used, but unless these are sufficiently strong to destroy tissue, and hence set up inflammation, which in turn causes muscular spasm, the result of treatment will be negative, or if the fistula closes, it will in time, and under favorable constitutional conditions, reopen, showing that the disease was never cured.

The same is true of fistulæ of the penis, externally the canal may unite but the internal orifice is then converted into a sac, where matter collects, and finally breaks down, reconverting the blind internal into a complete fistula. Cases of this nature that have come under my observation, have been more successfully and quickly cured by an operation, in one instance having for its object the paralyzing of muscular fibres, in the other that of holding the fistulous surfaces in contact against muscular contraction.

In old anal fistulæ, even putting at rest the sphincter muscles, is sometimes not sufficient to effect a cure. In such cases I have found a saturated

solution of Iodine and Glycerine to be efficacious, while in cases of recent fistulæ but just passed the stage of abscess, I have used the same preparation with success, unaided by operative means, but such cases cannot be regarded as more than abscesses, and will if opened in time, before there is degeneration of tissue, heal with the application of pressure, and some dressing which controls the formation of pus. Granting the premises to be true, namely: that both ulcer of the anus and rectal fistula, are prevented from healing by the normal and abnormal contraction of the sphincter ani and levator ani muscles, that treatment will be the most successful which puts at rest this muscular activity. In anal ulcer, I have obtained the best results from forcible rupture of the sphincter ani muscle, and I attribute this to the fact that it does not necessitate an external wound, though in some cases of long standing, I have found the mucous membrane surrounding the anus so much contracted as to require division, which is then best performed by means of the knife, the resulting wound being cleaner and more ready to heal.

The direction given to the division of the muscles, is not without effect upon subsequent recovery, because when it is considered that the fibres of the muscle are eliptical, the two halfs of which are joined, not by fibrous but connective tissue, on the median line, in the direction of their long axis, anteriorly and posteriorly, it will be seen that if the muscle is divided at the site of one of these commissures, the power of contraction is more effectually lost than if the muscle is divided through its body. For this reason the best results are obtained by so applying the fingers as to bring the expenditure of force towards the coccyx in woman, and the perineum in men. If the muscle is divided with a knife, I prefer to do so subcutaneously, plunging a small tenetome through, not behind the sphincter and cutting towards the bowel so as to divide only those fibres which form the internal border of the muscle. In the majority of cases this is quite sufficient, because the irritation caused by the ulcer is at first limited to the fasciculi involved in the lesion, and will cease when these fasciculi are cut. I have found that in such cases it is well to make the incision directly beneath the ulcer.

For the cure of fistula of the rectum I prefer to divide the muscle with the knife, even when the internal opening involves the upper sphincter, the hemorrhage is sometimes profuse, but can be controlled, and the use of a ligature, if the fistula extends deeply, prolongs recovery, is painful, and sometimes fails to effect a union, necessitating a second operation. I have succeeded in healing fistulæ which opened deeply, by cutting the external sphincter, and applying a ligature to the internal muscle. The union of the cut bowel must be retarded until the deeper part of the canal is opened, else the fistula may heal from without. The advantages of using the knife are that the sphincter is at once divided, and the raw surfaces are permitted to rest in contact with each other. The union which follows is not retarded by free evacuations from the bowels, if proper cleanliness is observed, and therefore medicines given to retard the natural stool are not only unnecessary, but harmful, because they reduce the vitality of the mucous and muscular tissues.

LIII.

The Topical Use of Sulphuric Acid in Necrosis.

BY H. I. OSTROM, M. D.

The conditions which precede necrosis are not distinguishable from an impaired circulation which results in breaking down of tissue through strangulation, and death. These initial symptoms may be easily recognized as pointing to deep seated inflammation of the cellular and connective tissue in immediate relation with the bone, and if early treated by a free incision of the soft parts, will, I believe arrest the progress of the disease and avert the sequela of bone complication. But when the osseous circulation has become so far impaired as to cause plugging of the nutrient canals, this procedure which has for its object relief of pressure will not avail. The bone dies, and is separated from the living bone by the line which marks the free from the obstructed circulation. The two natural methods of removing dead bone when separated from living, disintegration and *en masse* are imitated by art with certain advantages in favor of the latter, rapidity and hence limitation to the spread of the disease.

The necessity for the early removal of the necrosed portion of bone exists in the fact that contact of the pus which accompanies osseous degeneration is unfavorable to the establishment of health, because this purulent matter possesses in a preeminent degree the quality of furnishing food for putrefactive germs. It is also probable that the sequestrum occupies the position of a foreign body in the lesion, and hence retards those changes which are a part of the process of repair.

Operations for the removal of necrosis are severe in proportion to the region involved and the extent of the disease, but aside from these objections, neither the finger nor the guage can accurately detect the boundary of the disease, and therefore, the result of an operation is frequently either to remove too much or too little bone; in the first instance doing violence to healthy tissue, and thus favoring a return of the initial stages of necrosis, and in the second instance leaving a nucleus for continued development and growth.

In pursuance of these facts, surgeons have sought to obtain some solvent for dead bone, the use of which would exclude the necessity of extensive mutilation of soft parts, and render it possible for the diseased portion to be discharged through the sinuses which almost invariably coexist with necrosis, either as small particles or wholly disintegrated as a constituent of pus. Progress in this branch of conservative surgery has been arrested by the difficulty encountered in procuring a solvent that would act only on the diseased bone, because if the healthy bone is injured, the disease is not arrested, and if the vitality of the soft parts is impaired, dangerous complications arise. Caustic Potash, Hydrochloric, Nitric and Muriatic acids have been used for the purpose of a bone solvent, but each is open to the objection that it is not confined in its action to the diseased structures. Sulphuric acids, however, though powerful in its effect upon dead bone, excites no more than a slight stimulating action

in the surrounding parts. This Acid dissolves the sequestrum completely, and the actual line which separates the dead from the living bone is absorbed as the boundry of activity. The action is chemical, the Acid dissolving out the phosphates of the bone, very much after the manner of the preparation of Phosphorus for commerce; but the affinity is in a measure annuled in healthy bone by the presence of animal matter. It is not here maintained that every case of necrosis is amenable to treatment with Sulphuric acid. I believe that the chemical dissolution of dead bone will be limited to those cases in which the subperiosteal layers are involved, and will prove quite impracticable when the deeper structures are affected because of the difficulty experienced in bringing the acid in contact with the dead tissue, but I have thought that such cases would be successfully treated if the necessary incisions for removal of a sequestrum were made, and Sulphuric acid substituted for the guage. Thus it would be possible to avoid the shock attendent upon the use of bone instruments, and also to have respect to the line of demarkation.

The length of time necessary to accomplish the dissolution of dead bone varies with the strength of the acid used. I am in the habit of preparing the strong Sulphuric acid, diluted with an equal quantity of water. A stronger dilution than this will cause irritation of the healthy structures, and is quite unnecessary, unless the removal of the sequestrum becomes imperative.

In the treatment of necrosis with Sulphuric acid, it is usually sufficient to apply the dilution to the bone once every day. For this purpose, either a half ounce syringe, having a fine silver nozzle, or a glass pencil will be found appropriate.

Severe cases may require more frequent application of the acid, and in some instances the removal of the bone has seemed to be expedited by retaining a piece of lint saturated with the acid preparation in contact with the diseased tissue. I have selected the following case of necrosis as illustrative of the action of Sulphuric acid in the severer forms of bone disease:

A boy three years old was brought to me with necrosis of the os calcis which had originated in an injury received eighteen months before. During the last ten months, occasional spiculæ of bone had been discharged from a small sinus situated on the inner side of the heel. All previous treatment, even excision performed a few months before I saw the case had failed to arrest the disease, and the entire bone was fast becoming involved. He received an injection composed of equal parts of Sulphuric acid and water every day for one week. On the fourth day, a number of small pieces of bone were found in the pus. After this the pus became reduced in quantity, and within fourteen days the sinus had healed from the bottom, and presumably the bone, for five years have elapsed, and there has been no recurrence of the disease. During the use of the Sulphuric acid, the child received Silicia^{200} every night, the injection being administered in the morning, and I believe that the cure of the case depended upon the internal medicine, but I am convinced that the cure was rendered more rapid by the chemical action of the acid. While dead bone remains in contact with the healthy structures from which the healing must come, the establishment of health is retarded, and therefore, the in-

dication is to remove the foreign body as quickly as possible, and afford the curative remedy an opportunity to act. That medicines alone will accomplish this result admits of no doubt, but the process is necessarily slow, and the removal of the cause retarded until the irritating body has been taken away. It is, therefore, here submitted: First—That many cases of necrosis are advantageously treated by the local use of Sulphuric acid; Second—That Sulphuric acid may frequently be used as a substitute for excision; and Third—That Sulphuric acid is not curative but mechanical and conducive to a cure.

LIV.

Concerning the Effects of Position Upon the Reduction of Strangulated Hernia.

BY H. I. OSTROM, M. D.

Excepting in rare instances, a hernia is not a rupture, because during the passage of the viscus beyond the normal boundary of the abdomen, no tissues are lacerated; the abdominal walls are forced before the protrusion and constitute the hernial sack. From this it follows that the dislocated organ does not leave the abdominal cavity but passes into an artificial canal which is continuous with that cavity, and therefore must be returned by the same route through which it came.

The protruding organ does not sever its connection with other abdominal organs, only their relative position is changed. Therefore, the contents of the hernial tumor may be acted upon by those powers which effect the organs remaining within the abdomen, and hold each mechanical body in its place. Upon these two points is based my proposition; any abdominal hernia, not adherent to the surrounding tissues may be returned to its normal relations by causing the patient to assume a position in which the laws of gravity are permitted to act in opposition to the protruding organ; the demonstration of which lies in a consideration of the nature of the hernial tumor.

An abdominal hernia usually contains a small portion either of omentum (epiplocele) or intestine (enterocele) or both (enteropiplocele), and unless severe constriction occurs in the wall of the tumor, these parts are properly nourished and continue to perform their functions. In the case of enterocele, there is no interruption in the calibre of the canal, of which even in severe cases twenty-three or twenty-four feet, remain within the natural boundary of the abdomen, We have, therefore, to atcertain the effect exerted by this retained portion of intestine upon the protruded knuckle.

The peristaltic motion of the intestines not only serves to digest food and urge the refuse from the body, but has the effect of constantly changing the position of the canal in all its parts, at times increasing and again decreasing the long diameter. In this way the natural motion of the

intestine will tend, if not opposed, to reduce a hernia. But when the protruded part becomes strangulated, the peristalic motion alone is not sufficient to accomplish a reduction, in such cases. The weight of the abdominal organs making powerful traction from within will, if aided by position, draw the part to its natural relations. To establish this, we have to inquire into the nature of the strangulation that occurs in hernia. That this does not reside in the muscular structure of either the internal or external rings is evident from the consideration that the contractile fibres in these situations are not ruptured, and therefore the hernia does not lie within the direction of muscular activity. The abdominal rings are not closed by the contraction of the muscles that surround them, because their boundary is made by the free edge of the muscles when the fibres are straight and normally tense. Even in the external abdominal ring, there is little, if any, arch given to the lower edge of the external oblique muscle, and without this arch it is impossible to diminish the circumference of the openings. Moreover, there is nothing in the effort that produces strangulation to cause contraction of the muscles in this region, and it is also very uncommon, if it ever occurs, for one bunch of muscular fibres to contract while the greater portion of the muscle remains inactive.

Strangulated hernia is closely associated with congestion, and subsequent effusion, and an enlargement that takes place in the intestine outside of the opening through which it passed. As a consequence of these processes is the cause of strangulation and the principal impediment to reducing the tumor. The rings present the appearance of constriction, but this is only in comparison with the size of the hernia, they do not alter in size. That the muscular structure surrounding the openings through which hernias pass is rendered tense is probable because it is subjected to considerable pressure, but this is not the cause of strangulation, it is one of the effects. The rationale of strangulation is here advanced with earnestness because of the relation that it bears to the treatment of hernia.

From what we have said it follows that a position by which the intestines are drawn away from the hernial protrusion and hence one that induces traction upon the tumor will tend to reduce the protrusion because such a position will also force any fluids that have collected in the substance of the hernia to gravitate to where there is the least resistance, a point opposite to the protrusion.

Such a position is best attained by suspending the person by the heels. In the case of children, this is practicable, but with adults it is frequently impossible to accomplish. In such instances, the individual should rest upon an inclined plain, the angle of which is quite obtuse, and maintain this position as long as posible. I am disposed to regard taxis as a doubtful adjunct to the process of reducing strangulated hernia. It is mainly useful in pressing the blood and serum from the protrusion, but this is unaccomplished unless this pressure is applied towards the long axis of the swelling. This cannot always be expected, because the fingers are not in every instance able to compress the mass uniformly; hence the dislocated part is pressed against the tense muscles, and the irritation that follows adds to the effusion already present. Taxis may be useful, but unless employed with the utmost care and in selected cases, it increases rather

than diminishes the conditions that produced and sustain the strangulation. So far of the *mechanical* reduction of strangulated hernia; the *medical* treatment occupies a no less important position, but does not belong to this paper. Any therapeutical agent, however, that aids in reducing this affection must act upon the circulation to diminish congestion, and cause an absorption of the effused fluids. The knowledge that a certain remedy or group of remedies will produce this pathological change is not an indication for its administration, the individual similimum is the sole guide, but when a medicine does effect a cure it is by virtue of the properties indicated, and not because of an ability to relax muscular fibres.

LV.

Idiopathic Necrosis of Pubic Bone.

BY C. L. BAGG, M. D.

Patient says "he has never had syphilis or any other disease." Age 28; single; Ireland; boatman.

No traumatism or scrofulsois—and up to three years ago, he had always been strong and healthy.

At this time he was working in a boat as fireman, where he was exposed to sudden changes from heat to cold. At this time he was seized with a very severe chill which lasted for some time, and was followed by pain of a rheumatic character over the body generally, and which was most severe over the right inguinal region. The other pains in the body disappeared gradually, but that over the inguinal region still remained, and a small swelling appeared which was very painful, and which finally broke under poulticing. The discharge was very profuse and continued to be so for five or six months, when a piece of bone worked out, and there seemed to be a slight improvement, the wound partly healing. In about three months it again broke out, and continuing so, he went into Charity Hospital, (November, 1878), where a piece of bone, which lay quite superficial was removed. The sinus nearly healed up, with little discharge from it, and was only slight and seldom felt. He went out and resumed his business, but from standing and exposure the sinus again opened, and small bits of bone came away from it. Upon entry here, patient was very much emaciated and weak, a good deal of watery discharge was coming from the sinus, which was open, and whose lips were soft and patulous. The probe detected a surface of dead bone.

He received *Silicea*[30]. *Phos.*, *Ars.*, etc. Frequently had attacks of slight chills, followed by fever, thirst and restlessness, which would soon yield to *Ars.* His condition continued the same up to time of operation.

Dr. Carleton examined the case very carefully, and decided to operate and remove the dead bone, a piece of which he thought must be loose and working upward. Upon examination he found a sinus opening about four inches above symphysis, and three-fourths of an inch to the right of

median line. The lips were patulous, showing more or less of fungous granulation. The probe was directed downward and backward about four and one-half inches, passing anteriorly, and not touching the peritoneum or bladder, where it reached rough, loose bone, evidently on the posterior surface of symphysis. On moving, the patient experienced sharp pain, and felt something move. To confirm this diagnosis, the finger was passed under the pubic arch, feeling through scrotum, where a depression in the contour of the bone was found, but the bone fragment could not be reached, having evidently worked a little upward. The case was complicated by a complete right inguinal hernia. On reducing this and passing finger into the inguinal ring, a depression could be felt upon the body of the pube, showing the seat of former exfoliation. The spermatic vessels, and internal epigastric artery, were felt pulsating on the outer side of the ring.

Saturday, January 31st, 1881.—*Operation* was performed at the Clinic before the students of the New York Homœopathic Medical College, and the New York Medical College and Hospital for Women. While the patient was being anæsthetized, and bladder emptied, Dr. Carleton explained the principal features of the case. A probe was passed into sinus as a guide. The opening was enlarged to the linea alba by raising the tissues on a director and slitting them up with a bistoury. The finger was introduced into the sinus and could feel the dead bone, but the opening was too small to allow forceps to be used, whereupon the opening was enlarged transversely to the right three-fourths of an inch. Now, with the fingers as a guide, bone forceps were introduced, and a large loose fragment grasped and removed. On further examination there was found on the right pubic bone, near the symphysis a large cavity from which the loose piece had been detached. The walls of this cavity, however, were smooth and firm all around showing that healthy bone had formed, and in some places the periosteum had covered the denuded surfaces. There was but slight hemorrhage. The wound was ordered to be syringed with Carbolic acid and water, one to one hundred, and then with Calendula one to thirty-two. Two stitches to be taken, one on each side of the former sinus, and the wound to be covered with a compress moistenep with dilute Calendula. This dressing to be repeated three times per day. The fragment which had lain detached for several months, was about an inch and three-fourths long, by three-fourths of an inch wide, and one-half of an inch thick. By comparing it with an os innominatum, it was found to consist of the quarter part of the bone, immediately adjoining the right symphysis pubis, including most of its articular face, and a portion of its posterior surface. Its lower three-fourths of an inch was a portion of the descending ramus. The fragment was very spongy and its surface extensively eroded.

The patient rallied well from the ether, but three hours after operation was seized with a severe chill, which, however, was cut short by hot bottles placed to the feet and back. Shortly the temperature rose to 104½°. Patient restless, thirsty and skin dry. Pulse 99, ℞ Acon. every twenty minutes. In two hours he fell asleep, waking at 12 M.

Feb. 1st, 12:30 A. M., temperature 99°, pulse 64, patient quiet but little thirst or pain.

5:40 A. M., temperature 99¼, pulse 68, comfortable.

10:00 A. M., temperature 99½, pulse 78. Some sharp sticking pain deep in wound. Motion gave but little pain. No tenderness about wound. Profuse discharge of decomposing blood. Syringing continued.

12:00 M., temperature 102½, pulse 88, ℞ Acon. half hourly.

4:30 P. M., " 101¼, " 80.

Feb. 2d, 12:30 A. M., temperature 99, pulse 60.

" 4:20 A. M., " 98½, " 52. ℞ Digit. tinct. gtt. V. Aqua. ℥ ij Sig. teaspoonful hourly. 10:00 A. M., temperature 99, pulse 65. Rests well and seems to suffer but little pain. Discharge not quite so profuse or offensive.

Feb. 2d, 2:00 P. M., temperature 100, pulse 75.

" 5:00 P. M., " 99¾, " 70. Appetite is fair, rests well and seems to suffer but little pain. ℞ Calend.[300] 11:00 P. M. temperature 98.

Feb. 3d, 5:45 A. M., temp. 99¾°. Rested well during the past night.

10:00 " " 99°, pulse 69.

4:00 P. M., " 99½°, " 65.

7:00 " " 99°, " 73.

10:00 " " 98°, " 70.

Feb 4th, 3:15 A. M., " 98°, " 60.

" 9:00 " " 99°, " 75.

Discharge much less, still watery and slightly offensive. Only slight periodical pains of a sharp gnawing character deep in wound. Rests well, appetite good. Dressing continued. ℞ Same.

Feb. 5th. Patient improving finely. Little discharge from wound. Wound seems to be healing from the bottom. He has a good appetite and feels in every way much stronger. ℞ Same.

Feb. 9th. Convalescence steady and rapid. Looks forward with joy to an early discharge from the hospital a well man.

LVI.

Muscular Anchylosis Following Dislocation of the Shoulder Joint.

By GEORGE ALLEN, M. D.

A perusal of works upon general surgery, would lead one to infer that anything but the most favorable result is the rarest attendant upon a speedy and perfect reduction of dislocations at the shoulder. On the contrary the anatomy of this joint, as well as the pathology of its dislocation, would lead one to expect that the mobility of the joint must be more or less restricted, and its usefulness somewhat impaired for a variable period, even when the reduction has been properly accomplished.

The anatomy of the shoulder joint embraces numerous large nerve trunks, important arteries with numerous branches, and a complex arrangement of muscles and ligaments. As a pathological lesion of shoulder

dislocation, we always have laceration of the capsular ligament, while the injury to the blood vessels, nerves and muscles varies, probably with each case, and the extent of their injury, is so difficult to determine with accuracy, that our prognosis must always be involved in a good deal of uncertainty.

The case reported in this paper, to which is added several similar cases recorded by Hamilton, serve to illustrate one of the results which may follow and give an unsatisfactory termination to a simple dislocation of the humerus, which has been perfectly and properly reduced.

On the evening of January 25, 1879, Miss G., received an injury by the overturning of an omnibus in which she was riding. On being called a few moments after the injury, I found the patient complaining of severe pain in the right shoulder, and numbness of the entire upper extremity. The right hand was cold from impared circulation in the limb. Examination disclosed the head of the humerus dislocated in a direction nearly forward, and resting beneath the outer third of the clavicle. Reduction was effected by extension with the heel in the axilla, with the exercise of comparatively little force. The head of the bone entered the socket with a snap, audible to the bystanders, and distinctly felt by the patient, and myself. All deformity at once disappeared, the hand soon became warm, and the sensation of numbness was no longer felt. Passive motion could be made in any direction, but the patient herself had not the power to move the arm at all.

Jan. 26th. The arm is not painful except when moved, the right hand is slightly swollen, and there is discoloration of the skin in a small spot over the insertion of the deltoid. Patient cannot move her arm to raise it from the body, and pain is experienced on passive elevation of the arm, the pain being experienced at the attachments of the deltoid and supra spinatus muscles, and not at all in the joint. Careful examination of the joint shows the head of the bone to be perfectly in place.

Jan. 27, 1879. Began the application of the galvanic current. This was continued, at intervals of a few days for several weeks, and resulted, for a time, in improvement, the power to elevate the arm increasing slightly under use of the electricity. Gave also Rhus. tox. in attenuations varying from the first to the two hundredth.

Feb. 11th. Improvement from the use of electricity having ceased, advised packing the arm at night to be followed by showering and friction in the morning. Improvement followed this treatment for a time, but a standstill again ensued after a few weeks. I then tried electricity again, but with no improvement after the first application.

April 4th. Advised the patient to have the parts about the joint well rubbed with oil, and to exercise the limb systematically as much as possible, without causing pain. This advice was faithfully followed, and improvement has been gradual and steady ever since.

Aug. 1st. At the end of six months the arm is nearly restored to its original strength and freedom of motion. The power to elevate the arm was the last to return, all the other motions having returned some time before elevation could be perfectly accomplished. This accords with the statement of Billroth, who says, (Surg. Path. p 248), "in the shoulder joint it is frequently many months before the movements are quite free,

and elevating the arm is the last motion to return." Several surgeons of ability examined this case and all agreed that the humerus was properly in place. The difficulty in this case was evidently muscular anchylosis. Of such cases Hamilton says, (Fractures and Dislocations; third edition, p. 548): "When the reduction has been made within a few hours, I have found the shoulder affected with muscular anchylosis, with more or less weakness of the arm, after a lapse of from a few days to one or two years." He gives several cases in illustration from which I select the following: "A laboring man, aet 41, had dislocated his right shoulder into the axilla. An intelligent young surgeon reduced the bone easily with his hands alone. After six weeks he called on me, accompanied by his surgeon, thinking it was not properly reduced, because the arm was still painful, and he could not move it freely. The bone was, however, well in its socket. One year later, I examined this man, and found some anchylosis remaining." In another case "the anchylosis was so complete that the humerus could not be moved separately from the scapula, but there was no displacement, the gentleman called on me at the end of four years, and I then found the arm restored to its original condition, but not quite so strong as before."

Hamilton further says: "In no case that has come under my observation, unless the bone remained still unreduced, has the anchylosis been permanent. For this reason I am disposed to think that muscular rather than fibrous or ligamentous anchylosis is the cause generally of immobility of the joint. The anchylosis in question seems to be the result simply of laceration, or more generally of severe strain of the muscular fibres." Of prognosis in shoulder dislocation, the same writer gives the opinion that (S. Op. Cit. p. 458), "in a great majority of cases the limb is not restored to its original strength and freedom of motion until after the lapse of many months. Opposite and more favorable results must be regarded as exceptions to the rule." I have quoted at considerable length from Hamilton, because he is a standard authority in these matters, and because he is almost the only writer who mentioned the difficulty which occurred in the case reported, and for the further reason of giving his authority in the matter of prognosis. Most surgical writers and teachers would incline us to give a too favorable prognosis in many cases of shoulder dislocations, conveying the idea that if the reduction is properly accomplished, within a reasonable time after the injury, all will be well. We have seen that this is not sure to be the case, but that a variable period of from a few months to one or two years, may be required to elapse, before perfect usefulness of the limb can be regained. We can never be sure of the exact extent of the injury done to the parts about the joint. Therefore, where so many elements of uncertainty are present, it is the part of wisdom to make a guarded prognosis. It is better to err on the side of safety. If we remember Hamilton's statement "that the more favorable terminations must be regarded as exceptions to the rule," we shall make our prognosis so guarded that the results will not be unsatisfactory, either to patient or physician.

LVII.

Blood Poisoning From a Surgical Point of View.

BY H. C. FROST, M. D.

That doctors disagree and are proverbial for that faculty, is acceded to by all, although they have their defenders who say the stigma should rest no more upon the medical profession, than the world at large. But pick your man from whatever walk of life you will, watch him carefully, and you will soon find him disputing with his neighbor. If it were not policy to change one's base at times, the assertion would be supported by still more evidence. But I think this proneness to difference of opinion, has done more for the advancement of our science than anything else, for it makes for each an opponent, whose workings serve as emulations.

You can not point to a single instance in the history of medicine, in which it has been enriched by some great discovery, but what that same discovery was most bitterly denounced by great lights of the profession. "Years ago surgeons staunched the blood, when a limb was amputated, by the application of boiling pitch to the surface of the stump; and Hildamus, the patriarch of German surgery, amputated the limbs of his patients with red hot knives, in order that he might divide the flesh and sear up the vessels at one and the same time. Upon all these practices the happy suggestion of Ambrose Pare, viz.: to shut up the bleeding vessels with slender ligatures, was a vast improvement. But the College of Physicians, of Paris, attacked Pare for his proposed new practice and innovation. They attempted by the authority of the French Parliament, to suppress the publication and dissemination of his observations, and for nearly a century afterwards, some of the hospital surgeons of Paris continued with characteristic obstinacy, to prefer cauterizing the bleeding arteries, to applying the simple ligature after the manner of Pare."

This contrast of opinion is not confined to a few points of our study but to nearly all. Perhaps there is no one disease in which the great minds of the medical profession are so much at variance, and so equally divided, as on this subject of pyæmia, or blood-poisoning. We cannot agree with all, and must fall into the ranks of one side for the present, at least, although in so doing we are obliged to accept some points that wear a doubtful tinge. It is evident that the profession know but comparatively little of the true nature of this disease, which in most instances proves so rapidly fatal. As a proof of this we have but to remember that most earnest and very lengthy discussion of the subject which took place before the Pathological Society of London, some years ago, in which not only a score of the most eminent surgeons of London took part, but many equally well know from the Continent and America.

From the fact of its pathology being wrapped in so much mystery, and the results of treatment being so discouraging, it becomes a subject of paramount interest to the surgeon; and too, its close alliance to puerperal fever, one of the most fearful diseases with which we have to contend, should afford no slight interest to the physician.

Without doubt this disease has preyed upon man ever since human flesh has been heir to any malady, unless it be that it is an outgrowth of that degeneration of the human race, which some of our dark-sided, garrulous brethren like so to talk of. But leaving that point to those whom it interests, it is certain that blood poisoning was not recognized as a disease till within a few years; but in time surgeons commenced to notice that in persons who die of exhaustion, as they termed it, abscesses formed in different parts of the body, and when these abscesses were found, so were a peculiar train of symptoms.

The first explanation was that the pus from a wound was taken up by the vessels and conveyed by the blood to distant parts of the body—thus the abscesses. Soon after Cruvelhier injected Mercury into the vessels, abscesses were formed in different parts and in each a small particle of Mercury was found, this experiment was followed by the injection of Ink, Carmine and numerous other substances, all giving rise to like results. The theory was then advanced, that the pus was absorbed by the blood, carried to remote parts of the body where it was deposited, and each deposite became the focus of an inflammatory action which terminated in suppuration. They examined the blood by the microscope and thought the pus cells could be seen; but now we know that it is impossible to distinguish between pus cells and the white corpuscles of the blood. Next their attention was attracted to puerperal fever and as they did not always find pus in these cases, they were necessitated to invent a new term, hence septicæmia, and some denominated it icoræmia, but the latter term soon became obsolete.

According to the most acceptable view to our mind, we will use the term blood poisoning as the correct one, embracing as it does both pyæmia and septicæmia. If there is a dividing line between the two terms it has not been made clear. They are merely different stages of the same disease, the difference being but one of degree.

This disease is most commonly, but not necessarily, associated with wounds. After an operation of any magnitude, we get constitutional disturbance or surgical fever, these symptoms were for a long time confounded with blood poisoning, that is the reason why the latter condition was overlooked.

Let us look at the features of a case. Take a man whose leg has been amputated, operated upon by a skillful surgeon, dressed in the most approved manner, the best attention shown it; the next day the temperature is little, if any, above the normal, on the second day the wound looks well, and perhaps the third and fourth days present nothing out of the normal train. Most often between the fourth and tenth days he may complain of a headache, and a feeling of lassitude, suddenly he has a severe rigor or chill, this passes off without any subsequent hot stage, (unlike intermittent fever), but he breaks out in a profuse perspiration, temperature goes up from 98.5 to 102, 103, 104, 105, etc., pulse 120 or 130, may be higher or below the normal, he feels weak, his tongue is tremulous and soon coated with a white fur; no appetite, he is thirsty, restless, and cannot sleep. This man has blood poisoning. (They are the symptoms of a case which I lost). The next day he may be better, but on the second or third day after, the rigor is repeated, perspiration more profuse,

he becomes weaker, may be constipated or have diarrhœa, or a yellowish tint of skin and conjunctiva; countenance pinched, sometimes there is a very peculiar odor, although this symptom is not always present, some surgeons place great reliance on it, urine scanty and highly colored. At last he dies of exhaustion, but if he continues to live, very likely in addition to the above symptoms you will find some of the joints very painful, tender and swollen, seldom red, more generally pale, may spread from joint to joint. If you were to open these joints you would find pus, and often the tissues around filled with pus, or you may find these collections in any part of the body. Then with these symptoms you may have those of pneumonia indicating the formation of abscesses in the lungs, or we may have those of pericarditis, nephritis, etc., which indicate the formation of abscesses in those organs.

You will observe that we have two kinds of symptoms, general and local. The rigors, sweats, rise of temperature and increased frequency of pulse, are the four cardinal general symptoms. The local symptoms are those which indicate local inflammation going on in the different parts, these last vary greatly in different cases.

In a severe case we have rigor, followed by sweating, temperature rises, pulse rapid, sinking—may sink in twelve hours. The average duration of blood poisoning is from four to ten days. Where it proves fatal quickly, there are no abscesses, as pus has not time to form, but then we have what has been termed septicæmia (absorption of putrid matter), as in puerperal fever, which is very acute. Cases may be very transient, get well in from three to five days, they have rigors and sweats but they are not repeated and the patient recovers. In these cases there has been slight blood poisoning, according to my idea.

Cullen in his great work said that rigors indicated spasms of the extreme vessels. How very sagacious in him to say that, as in those days nothing was known of the capillaries. For generations after he wrote that, the medical men could not understand the expression.

We may divide rigors into two classes, the physiological and the pathological. Those which are produced by cold being applied to a part, or caused by the first passage of a catheter into the urethra are examples of the physiological; and in those there is no rise of temperature. The pathological class embraces those which occur with abscesses, fever, blood poisoning, etc., these are associated with a rise of temperature.

Do all pathological rigors mean a decided change in the blood? I think when rigors are associated with abscesses, they are caused by the passage of a certain amount of purulent fluid into the blood. I think in blood poisoning the more frequent the return of rigors, the less chance the patient has, as a general rule. The successive rigors are produced by the repeated absorption of the poison. But one dose may be sufficient to produce death, hence the amount absorbed has to do with the severity of the case in a degree.

If rigors come on a few hours after an operation, I do not let it alarm me, but take the temperature and generally find no increase, and consider it as a physiological rigor, owing to the patient becoming chilled during or after the operation. But if the patient should have a rigor the next day, after time enough has elapsed for the formation of putrid matter in

the wound, or in other words for decomposition to take place in the wound then I have reason to feel uneasy. I have found that the pulse quickens and the temperature rises before the occurrence of these pathological rigors, so you may say it does in surgical fever. But where they go up rapidly, do not be surprised if it developes in blood poisoning.

The larger the wound the longer the time required for repair, and the greater the amount of putrid matter formed, the more prone are they to this terrible disease, but it may occur from the slight wounds. In some cases there is no perceptible change in the wound at first, but more frequently you will find that the pus has changed in character, becoming thin, watery, sanieous and scanty; the granulations pale, flabby, scanty, swollen, or perhaps have disappeared altogether. The wound never continues healthy if patient lives long enough for a change to take place.

If we make a post mortem examination we find spots or patches of congestion in various parts and in different stages of formation, they may occur in any of the internal organs, or other tissues of the body. The pus forms very rapidly in large quantities. If a joint be opened you will be surprised to find it but little affected, whereas in a case of injury to a joint, if it terminates by suppuration into the joint, the joint will be found destroyed in most cases, but in blood poisoning abscesses unless of long duration, the joint will only show a slight congestion, this is a great distinguishing feature. We find the blood changed; it does not coagulate in the usual manner, clots are loose and not regularly formed in surrounding tissue, they decompose very quickly. The more acute the blood poisoning the more will be the general and the less the local effects, and vice versa. The local effects come out of the general. Often we find the tissues around the wound in an unhealthy condition and sometimes find thrombosis of the veins and arteries near. The whole can sympathize with a part only through the blood and the nervous system. By injecting these septic poisons into animals we can produce these same symptoms, therefore, these symptoms are produced by absorbtion of septic matter into the blood. Why does this absorption take place at one time and not at another? I think Billroth has explained it by saying the absorption could not take place through healthy granulations. In phlebitis a thrombosis is formed, and it was for a long time held that the inflammation of the veins was the cause of blood poisoning. Every vein that is inflamed becomes plugged. But blood poisoning *can not* be produced by the formation of pus in the veins, for the simple reason that pus can not be formed in those vessels. There is not a single case on record where pus has been found in the veins. If we have phlebitis a clot is formed which is carried on by the circulation and finally plugs the smaller veins by embolism. Mr. Savory of St. Bartholomew's Hospital, London, performed a number of experiments before the class, while I was a student there. He injected fresh Fibrin, then Oxide of Zinc into the blood. In both of these experiments he got congested spots in the lungs. Then he took fresh meat, digested it in water till it became putrid, filtered it thoroughly till not a particle of solid matter could be detected by microscopical examination, this was then injected the same as in the other two experiments, and precisely the same results were obtained, so that he concluded that the local signs of blood poisoning might be produced by injecting these three different substances into the veins.

We may get thrombosis without blood poisoning, and we may get blood poisoning without thrombosis, and we may get both together. Blood poisoning does not depend on thrombosis, and the strongest argument is that we may produce the worst form of blood poisoning by injecting a filtered putrid fluid. Blood poisoning is produced by the absorption of putrid matter into the blood. Every wound is bathed at some time with septic fluid, now why does not every patient die or have blood poisoning? Animal membranes select what shall pass through them by dialysis. It is the granulating tissue which forms the wall through which it would have to pass. Abscesses are protected by a wall of this kind. This point was illustrated very nicely to my mind, by a railroad man that I lost last spring. He was caught between the cars while coupling. An abscess formed on one side of his scrotum and a collection of blood or a hæmatocele on the other, the abscess was opened and its contents discharged, it healed without a bad symptom. Afterwards the blood was let out. I was justified in doing this as the hæmorrhage had continued for a number of days, was rapidly distending, and local applications and compresses were of no avail. I tied the arteries, blood poisoning resulted and death.

There are three classes of poisons: First—Mineral and vegetable which act according to dose. Second—Zymotic, which have a period of incubation, as small pox. Third—Blood poisoning which has no period of incubation, nor does it act according to dose. The poison of serpents, I think is nearest allied to blood poisoning.

Burdon Sanderson's experiments on dogs, show how different animal substances differ in the intensity of their effect. He injected putrid matter into dog A's abdomen, it produced severe symptoms but he recovered, he took some of this fluid resulting from the peritonitis in dog A's abdomen, and injected it into dog B's adbomen. Dog B died in twenty minutes.

I think pus in most instance is the substances absorbed, as it is always at hand. If healthy pus be injected into the blood, nothing like blood poisoning is produced, consequently the disease cannot depend upon healthy pus being taken into the circulation. Henry Lee, of England, and Hughes Bennett, of Scotland, are the men to whom this experiment is due.

The local symptoms are divided into external, as affections of the joints and superficial tissues, and internal, those affecting the internal organs. The poison being taken up by the veins is carried to the heart and is distributed to the other organs. But there may be exceptions to this rule, as was illustrated by a case under my care some years ago. In this patient after death the liver was found to be the only organ affected with abscesses. How was it? Simple enough. The patient had blood poisoning resulting from absorption of putrid matter from a rectal abscess, the septic matter was taken up by the hæmorrhoidal vessels, passed into the mesenteric and then by portal vein to liver.

DIAGNOSIS.

As I said before, this disease was formerly overlooked, and its symptoms ascribed to typhus, typhoid and rheumatic fevers, and to constitutional disturbances. The disease which approaches it the nearest by its symptoms, is acute rheumatic fever, and even now the one is mistaken for the other. Both have rise of temperature, increased frequency of pulse, rigors and sweats, and in both the joints are affected. But i

blood poisoning the symptoms are more severe, the patient becomes more quickly prostrated, and usually there is a distinguishable interval between the attack of the different joints, in rheumatism a number of the joints are being affected at the same time. Then we have the jaundice skin, rapid sinking, the peculiar countenance, and the history of the case in blood poisoning.

TREATMENT.

Blood poisoning is more easily prevented than cured. It is a very fatal disease when in the acute form. There has been a vast improvement during the past few years in the prevention. The improvement has been due in a great measure to the greater cleanliness; sponges have been abolished, each wound treated with its own apparatus. There are two conditions which favor it: First—A decomposing fluid in contact with a raw surface, and second, a state of the system which invites its entrance. Hence wounds should be kept in as healthy a condition as possible with the least disturbance to them—free use of warm water and disinfectants.

But suppose we get the symptoms established of acute blood poisoning. It tends to kill by exhaustion, and it is our business to support the patient by a nourishing diet and afterwards by the free use of stimulants. When they recover, in what manner is it? They often have diarrhœa, and nature eliminates the poison by means of the bowels, this occurs often enough to show one mode in which nature relieves the body of the poison. This would suggest to some that we might assist nature in eliminating the poison by means of purging, but to this there is an objection, as the patient is failing so rapidly that we will only take away more rapidly the remaining vital powers. Mer. Prot., Arsenicum and China would suggest themselves among the more prominent remedies. Homœopathic works are wonderfully reticent on this subject. Gilchrist ignores the disease, and it may be just as well that he does. In the Old School the Hypophosphites have been lauded, but they had a long trial during the rebellion and were proven worthless. Most of your acute cases will die in spite of medication, and many of the chronic cases will get well without it. It is not well to be too hasty in opening the abscesses as a rule, for if you open them in the joints you will get violent inflammation of the parts. I think it best to let them alone unless they are extremely painful, or interfere with the functions of some important part. Where they occur in the internal organs, nothing can be done for them.

LVIII.

Myo-Fibromata of the Uterus with Pregnancy.

BY CHARLES SUMNER, M. D.

February 1st, 1874, I was called to visit Mrs. C, aged 42. Of a nervo-sanguine temperament and quite active. She had been married two years and enjoyed usually good health. I found her suffering from an uncomfortable fulness in the region of the uterus, and some pain. She told

me she had passed over two menstrual periods, and had the symptoms usual to first stages of pregnancy.

External palpation revealed more fulness and hardness than is usual at that stage of gestation, and I thought she might be further advanced than she supposed. On digital examination I found the cervix normal, but no rebound on sudden upward pressure. After carefully examining the case I formed a diagnosis of pregnancy, but some abnormal enlargement connected with it, the nature of which I was unable to determine.

I saw her occasionally until about the seventh month, when she seemed to suffer more from fulness and upward pressure than is usual. At this time she expressed the opinion that her sufferings must be borne as a consequence of her condition, and concluded to take no more treatment but await the result. I saw no more of my patient until the eve of August 1st, which was nearly her full term. I was then summoned to attend her. I found her having slight pains at intervals of fifteen to twenty minutes. These lasted three or four hours. I called again in the morning and found her superintending her work in the kitchen. I visited her daily for four or five days, but having no recurrence of the pains, I ceased calling. August 10th was summoned again and found her about as when I called on the 1st. The os was somewhat relaxed and patulous. I gave a few doses of Secale 3d, but as before the pains left in about four hours. I saw her about noon on the 12th, when she had no pains but some downward pressure.

I was obliged to go out of town that afternoon to visit a patient, and on my return, about 7 o'clock in the evening, I found a call for my immediate attendance on Mrs. C. I hastened to the house and found the patient in a very precarious condition.

I was informed by the nurse that she had been taken with slight pains at about 4 o'clock, which increased in frequency but not in severity until about 5 o'clock. At this time a severe thunder storm arose, and the patient, who was sitting in her rocking chair, was startled by a terrific peal of thunder and a dead fœtus weighing six pounds was instantly expelled, dragging the placenta after it as it fell upon the floor. The uterus remaining inactive the hemorrhage was, of course, severe. The frightened nurse sent for the nearest doctor and soon Dr. Geo. F. Hurd was on the spot, and found the patient in the condition I have described. He laid her upon the bed, and sent for his uncle, Dr. E. H. Hurd, who was soon in attendance. They tried by every means in their power to stay the flooding, but in vain. The uterus did not and could not be induced to contract.

On my arrival I made an external examination of the abdomen and said to the doctors, there is another child here. Dr. E. H. Hurd replied that he thought so at first, but that Dr. George had introduced his hand and said the womb was empty. But, said I, we can feel it very plainly from the outside, and it must be removed at once. I introduced my hand, but, sure enough, the womb was entirely empty and showed no disposition to contract.

The patient was now thoroughly exhausted, and as we were unable to check the frightful hemorrhage, soon expired.

Having obtained permission we held an autopsy. Having opened the

body, the whole uterine mass was removed. It weighed ten pounds and measured eighteen inches in its transverse diameter and ten or twelve in its vertical diameter. Upon examination the enlargement proved to be myofibromata. The body and fundus were greatly hypertrophied and degenerated, forming the *myoma*, while the fibromata were of irregular size and scattered over the surface and through the substance of myomoid uterus. The largest of these fibromata, situated at the extreme left, was of an ovoid form and nearly as large as a full term fœtal head. This was found to be a multilocular fibro cystic-tumor, containing two cysts. The walls of the hypertrophied uterus varied in thickness from two to four inches. The ovaries and Fallopian tubes appeared healthy and in natural position.

There is no particular lesson to be learned from this description in regard to treatment, but it is presented merely as an anomaly of pregnancy existing in connection with such a condition. The muscular fibres of the uterus being degenerated and having lost their functions of contractility, there was no means of closing the mouths of the bleeding vessels after the placenta was detached.

LIX.

Anæsthetics in Labor.

BY A. P. HOLLETT, M. D.

At the Semi-annual Meeting of this Society, our amiable and efficient President, after the reading of an article on this subject, spoke of its great importance and also of the fact that it should receive our careful consideration. Believing also that a comparison of ideas and experience are for the interest and advancement of our profession, I take the liberty to write an article on the same subject.

I do not believe in the use of anæsthetics in all cases of natural labor, as a matter of routine, but hold that its good offices should be reserved for exceptional cases, where we have to resort to artificial means to accomplish the last act of reproduction.

There are several reasons that have been advanced heretofore, which we should, I believe, take into careful consideration. The first of importance is the production in the system of an artificial disease which must of necessity, interfere more or less with this natural process of nature. It is admitted, that "in a small proportion of cases, the uterine contractions are weakened, rendered less frequent, or even suspended," under the use of Chloroform, the drug most frequently used. We find that Chloroform affects: first, the brain, the organ of consciousness is benumbed, and simultaneously voluntary motion is impaired, while reflex mobility may be momentarily increased in the voluntary muscles and persist in the muscles of organic life, finally the first named muscles, undergo complete relaxation," (and why not the others?) "and the only remaining signs of life are given by the lungs and heart."

Thus does not this action of the drug, teach us that by persistent use, in even small doses, we may interfere with the work of nature? I believe, from what little experience I have had, that the use of Chloroform does to a more or less extent, have that relaxing effect in most cases and labor does not therefore progress as it would otherwise. Again on the other hand we have once in a while a case in which it acts as a stimulus to the pains. I have seen Morphine do the same, and I would account for the action on the homœopathic principles of *similia*, the coming in contact with disease. This drug has its after effects of "deathly sickness" which necessarily has its depressing effect on the system, and which are not desirable in these cases, if they can be avoided. I know that it is held that this drug neither prevents or weakens the subsequent contractions of the uterus, and yet one of the worst cases of flooding after parturition that I ever had was after yielding to the caprices of my patient in the use of Chloroform. This case was neither tedious or difficult. My experience has been invariably that my cases do not do as well after the use of anæsthetics, and I am led to believe that too many of our difficult cases in labor are caused by this "meddlesome obstetrics." Again we have the dangers that accompany the use of Chloroform in any case. I know that it is claimed as a matter of experience "that there is almost complete safety in the use of Chloroform in natural labor," yet I believe that this experience is defective in this, that the disastrous results are too often attributed to other causes, while in fact Chloroform may have been the primary cause. In the "National Dispensatory," Prof. Sutte and his co-laborers, after speaking of death by Syncope, in various operations, says (and this work is largely therapeutical), that "the almost complete safety of Chloroform, inhalations during natural labor, lends itself to a similar explanation. The gravid uterus restricts the circulation of blood in the lower limbs and increases it in the upper portion of the body, and this condition is mechanically exaggerated by the throes of labor, as well as by the mental stimulus of the parturient female. On the other hand, in the state of exhaustion and terror which accompanies most of the serious accidents of labor, and operative obstetrics, the conditions of safety are reversed, and Chloroform becomes particularly dangerous. Here we see that in trying to establish "the almost complete safety" of the drug they show forth its dangers. It is in these last class of cases, that it is largely used. Should we not heed the warning of these writers when they say: "The surgeon, therefore, who employs Chloroform takes upon himself the risk, which no necessity imposes upon him, of destroying human life." Yet in many cases of "operative obstetrics," notwithstanding the danger, it may be necessary. In surgery homœopathy has done away with many of the operations deemed necessary by the old school, and in many of these cases, anæsthetics, anodynes, etc., are discarded for something better. Why not do the same with Chloroform, to the same extent, in operative obstetrics.

This drug is particularly commended by the old school, in puerperal convulsions and used to some extent by homœopaths. This is not the way we treat an ordinary case of convulsions, and why should we digress in the puerperal state. I have had but little experience in this direction, having had but one case, which I treated homœopathically, the same as

an ordinary case of convulsions, and without the use of Chloroform. The treatment of this case was a success, and I believe that all who follow this course of treatment will be as successful as in other cases.

Another objection to the use of Chloroform in labor is the loss of sensibility which I believe to be an essential prerequisite to success in these cases. It is generally admitted that the subjective symptoms in the treatment of disease are of the most importance, and in these cases, we all know how well the observant accoucheur can tell from the expressions of the patient, as well as her acts and appearance, what the pains may be accomplishing in the progress of labor. H. N. Guernsey in his work on Obstetrics, after speaking of the efficiency in these cases of a "careful and skillful homœopathic physician ready to administer the proper remedy for whatever deviation from the normal condition may occur," speaks in contrast as follows: "How different when the blood is poisoned and the senses stupefied by anæsthetics; how impossible for the mother to give the alarm, or for nature to respond and furnish the symptomatic signs of danger, till it is too late." It seems to me that these objections as the principal ones, are worthy of some consideration and should receive the attention of the profession before they more fully adopt the general and indiscriminate use of anæsthetics in labor. To accomplish this purpose is the only object of this paper.

LX.

Puerperal Eclampsia.

By R. C. Moffat, M D.

Monday, Nov. 29, 1880. Mrs. D, very stout, brunette, aged 44, expected her eleventh confinement early in November, and became nervous and depressed, but not otherwise ill, until November 28th, when labor set in accompanied by some, but not considerable headache. Apart from the headache the labor was normal and rapid in its last stage, the placenta and coagula being forcibly expelled at 1:15 o'clock P. M. The obstetrical bandage was applied snugly to sustain the pendulous abdomen. The condition remained normal for four hours, when, without excitement or premonition, she became convulsed, presenting signs of cerebral congestion. There was no frothing at the mouth, yet the saliva was thrown out forcibly at each jactitation. The spasm was followed by stertorous breathing and opisthotonous, and these by unconciousness, excessive restlessness and calling for her husband, who, though present, was not recognized. The nearest medical help, (allopathic, but with a leaning to our school) was summoned, who gave, during the stertor, *Opium tinct.* ten drops to a half tumbler of water, a teaspoonful every 15 minutes, three doses. I arrived an hour later, between 6 and 7 o'clock, just in time to witness the subsidence of the second spasm, which was like the first. Chloroform and Ether in equal parts abated the stertor but not the restlessness, to restrain

which the constant efforts of two strong persons were required. She rolled from side to side, insisted on throwing off the clothes and on getting out of bed. She called constantly on her husband, yet could be quieted for a moment by my speaking to her. I remained at her side two hours, when I left, substituting *Cicuta Virosa* for the use of *Bellad.* 3d at hourly intervals, and anæsthetics, if needed. The bandage had been tightened by the allopath, with a view to retaining the uterus in situ and it had kept its place. I consider this a very good point. It was impossible to know whether lochia or urine had been passed, and it was not deemed wise to disturb her then by examination. Soon after 10 o'clock the third spasm set in, and I was again summoned, but not having returned to my office Dr. J. L. Moffat answered the call, and I joined him just before 12 o'clock. He had found her at 11: 15 o'clock in the stertor following the severest spasm yet. The condition was as follows: She had bitten her tongue and check on the right side; restless delirium had followed the stertor, and was characterized by profanity, endeavors to uncover herself and determination to escape. She called on her husband and talked of home affairs. Chloroform again quieted her, and, when insensible, the catheter brought away a fair amount of urine, just twelve hours after the birth. When analyzed it showed *one fifth in bulk of albumen.* Guided by the symptoms, absence of lochia and talking of the business of the day, *Bry.*[3] was selected and was alternated with *Hyos. tinct.* which was indicated by cyanosis, profanity, desire to uncover, loquacity, clonic spasms, general twitching of the face, opisthotonos, clenching the hands in front of the chest and suspended respiration during the spasm. The use of the catheter was followed by some quiet and a half hour's sleep, when, without premonition, the fourth spasm set in. It proved to be briefer and milder than the third which had occurred four hours before, Upon the subsidence of this convulsion the inspiration became free; but the spasm of the respiratory muscles impeded expiration to such a degree that the cyanosis was continued, and fatal suffocation threatened. Chloroform was of no avail against this; the condition passed off itself into stertor. Unquiet and interrupted sleep followed till 4 o'clock A. M., when she became excited and restless, threatening a recurrence of the convulsions. These were twice aborted by pushing the Chloroform. About 11 o'clock of Tuesday, twenty-two hours after the birth, she was quiet, but still unconscious, when I placed her under *Merc. corr.* 2d centessimal, continuing, however, the *Hyosc* in hourly alternation. At four o'clock I again returned, and was told she had the hardest spasm yet (the fifth). Her state was now, however, quieter than before, and enjoining the strictest attention to the medicines, I left her for about seven hours. At midnight she was sleeping satisfactorily, and it was at this visit that I thought some movements of the arms seemed to me to have a purpose. I hailed it as the first indication of returning consciousness.

At my morning visit of Wednesday, forty-six hours after the birth, I was informed she had slept well until morning; had waked conscious; had passed water; had had a return of the lochia, and expressed surprise at the crying of the infant.

An analysis of the next water she passed showed a mere trace of albumen, and I felt assured that the restoration was probably sure.

Milk appeared on the fourth day less freely and less abundantly than on former occasions, but this was not extraordinary at her age and under the circumstances.

The convalescence now went on without any prominent events.

The noteworthy points in the above are: First—The happy effects of *Hyosc.* —a few tincture pellets in water—a teaspoonful at a dose; and Second—The prompt action of *Merc. corr.* 2d in eliminating albumen from the urine.

LXI.

Puerperal Convulsions Cured by Amyl Nit.

By L. A. Clark, M. D.

Was called to see Mrs. ——, Jan'y 2d, at 11 P. M. The messenger said she was taken quite sick, but did not know the trouble; on arriving at the house, which was two miles away, I found the facts as follows: Mrs. —— and husband had retired for the night, she in her usual health, at 10:30 P. M., he was awakened by his wife "in a terrible fit," as he expressed it. In answer to my inquiry, I found that she was pregnant with first child and it was at full term. I made an examination and found the os fully dilated but no pains. I gave Gelsem.^{2x} in water, in hopes it would prevent any more convulsions, but in just one hour from the time she had her first one another set in, I immediately had her placed in position that I might use the forceps as soon as the rigidity of the muscles had subsided. I applied my instruments and with a deal of difficulty, I succeeded in delivering her of a ten pound boy. I could not get her to swallow enough medicine to do her any good, for it would run from her mouth as soon as put in. I thought as soon as the child was delivered my troubles were ended, but at the end of another hour, and just as the placenta had come away convulsion No. 3 set in worse than ever. Not having any Chloroform with me, I thought of what I had read in the *Homœopathic Times* the evening before, in regard to the use of Amyl Nit. in puerperal convulsions, and I thought I would try it finding some in my case. I waited for the time of the next convulsion, which came promptly at the expiration of the hour. I dropped eight drops on a handkerchief and allowed her to inhale it, in a few seconds the convulsion ceased, when before it had held on for thirty minutes. She straightened herself in bed and went into a good sleep, with entire absence of the hard breathing she had before. After her spasms she slept for four hours, and then awoke as from a short nap, none the worse for her terrible struggles, and much pleased that her child was born, and she had known nothing of it. I never saw anything act so promptly in my life as the Amyl Nit. did in this case. I think nothing could have done better if as well.

LXII.

Abuses of Uterine Surgery.

By E. Guernsey, M. D.

In no department of surgery has their been such brilliant and splendid advancement as in uterine surgery, and in no department has there been such meddlesome, entirely uncalled for and worse than useless interference, often by even brilliant specialists.

The great fault of the specialist is, that he gives too little attention to the general causes of disease, and looks not unfrequently upon the condition of the womb as the cause rather than the result of constitutional derangement. He is so accustomed to look for disturbing causes in this organ that he is apt to loose sight of the all important fact that it is only a part of a complicated, yet in health, a harmonious whole, and that in making up a correct diagnosis, the intimate relationship between every part of the human organism should be fully appreciated.

Instead of rushing at once to the conclusion that the slightly enlarged or displaced womb is the cause of the general disturbance, and must alone receive attention, a careful scrutiny may show the cause is elsewhere and the condition of the womb is the result rather than the cause of the disturbance in other organs. Among this class of specialists, if a little more attention were given to uterine therapeutics, their patients and the public would be the gainers.

Perhaps I can more readily illustrate my meaning by drawing from general practice a few cases in which I have been compelled to revise the work of some of the most noted and popular New York gynæcologists. I have no doubt almost every physician in active practice has had a similar experience.

1. *Displaced Womb.*—A lady forty-six years of age, recently married, miscarried at the fourth month of pregnancy. She did not make a good recovery, and her physician, a man prominent in his school, called to his assistance a gynæcologist standing foremost in the profession as a teacher, writer and practitioner. The diagnosis was retroverted womb, and a pessary introduced to hold it in its place. The patient was suffering from what was supposed to be malaria visited daily by her attending physician, while twice a week the specialist called to see that the pessary was doing its work. No examination was made of the water, and the only treatment she received was an occasional cathartic and twenty-one grains of quinine a day. This continued for nine months, during which the headache became more severe, the chills and fever more annoying and the pain in the region of the back, womb and bladder, more persistent and aggravating. At this time her attending physician left for a distant country to be absent several months, and I was asked to take charge of her general condition, while the specialist still continued in charge of the womb. At this time it will be remembered that she had been wearing a pessary and taking twenty-one grains of quinine a day for nine months, during all of which time she had not once left her room. A careful examination showed a

womb sound and in its proper place, but the deep indentation of the pessary in the vagina, in the region of the bladder, pointed to the fact that trouble had probably been kindled in that organ, partly by this mechanical irritant. On drawing off the water which was done now for the first time in her long and painful sickness, I found it nearly two-thirds pus. Here then was the cause of the chills and fever, the headache, the burning pain in the region of the bladder and the womb and the general prostration. If there had ever been more than a temporary displacement which would have righted itself with a little attention to general health, it certainly did not exist now. The case was now placed entirely in my hands. The quinine was discontinued, the pessary removed, the vagina washed with a soothing lotion, the bladder cleansed with injections and the whole attention given to the bladder and the building up of the general health. In one month nearly all the unpleasant symptoms had vanished, the water was passing free and clear, the painful look was disappearing from the face, to which was coming back the glow of health, and for the first time in ten long, weary months, my patient was able to go out in the open air. The case was originally in all probability nothing more than simple catarrh of the bladder, which was so aggravated by a meddlesome interference founded upon an error of diagnosis, that before the mischief was discovered she was almost beyond the reach of aid.

2. *Tumor of the Womb.*—We pass now to the diagnosis of another prominent specialist, the most popular perhaps, as teacher, writer and practitioner, of all that set of gynæcologists whose report of a woman's hospital in New York, not long since showed such an astonishing list of operations performed in a single year, that it contained the names of a large proportion of all admitted to the hospital during the year. The patient some years before had been under my care for a severe and long, protracted *cerebro-spinal meningitis*; so severe was the disease that one limb was partially paralyzed and was atrophied to such an extent that it was not more than half the size of the other. After a time she so far regained her health that she was able to walk and ride with comparative comfort for two or three years. At that time, while at work in a garden, she received a severe sprain and contracted a violent cold. A terrible attack of sciatica set in from which she was enabled to obtain no relief, except by hypodermic injections of morphine. Every variety of treatment was employed by her physician but with no permanent relief. Believing that the womb was implicated he requested her to consult a specialist. After the attack of meningitis some years ago, she had moved out of town, and I had in a measure lost sight of her; but I received an exceedingly sad letter from her, stating her case, and that the specialist had decided after a careful examination that there was a large fibroid tumor of the womb, creating the whole trouble. It could not be operated on, he said, but might possibly be so lifted up as to give her slight relief, but she must make up her mind to a slow progress of the disease and a painful death. A careful examination by myself showed no tumor but a womb retroverted and only slightly enlarged. She was taken to the Hahnemann Hospital, the sciatic nerve stretched with temporary relief. The great trouble is undoubtedly a lesion in the spinal cord. A subsequent visit to another specialist of the same school as the one who first diagnosed tumor, confirmed my diagnosis. A

short time previous this specialist who diagnosed the tumor, diagnosed in another case as "floating kidney" an enlargement of the posterior portion of the womb which has since yielded almost entirely to treatment.

3. *Laceration of the Cervix.*—A lady about forty years of age was informed by a celebrated gynæcologist, who is really an able writer and brilliant operator, that all her troubles arose from a lacerated cervix, which had occurred some sixteen years before on the birth of her child. An operation was absolutely necessary to which a preparatory treatment of several weeks in his private hospital was essential. The preparatory treatment had lasted about a month, when with a feeling of great depression, she called upon me, without stating the previous diagnosis or treatment. I found no perceptible enlargement of the womb, no displacement, and only a very slight laceration of the cervix, certainly not enough to produce the trouble from which she was then suffering. I had then to look for some other causes of ill health, and found them in a catarrh of the bladder, the water being rich in pus, and in an obstinate constipation produced by a partial paralysis of the lower bowel, which had existed since her last confinement. Careful medical treatment directed to the bladder and electricity along the lower portion of the spine and the track of the sacral nerves in a short time restored her to health.

Here are three cases, all of them important and amenable to medical treatment in which three prominent specialists, each celebrated as author, teacher and practitioner, had erred in diagnosis through lack of care in his general examination and through the strong tendency of his mind in looking at all physical disturbances through the glass of his own specialty. In case an operation were required each one would have performed it skillfully, but they failed in determining when an operation was necessary.

Is there not in the profession a tendency in the treatment of uterine diseases, on the one side to rely too much on therapeutics, and on the other too much on surgery. It seems to me that a great deal of modern uterine surgery is surgery run mad.

Operations are performed which are utterly useless, and which only benefit the pocket of the operator. Take for instance that for laceration of the cervix. In the majority of labor cases there is more or less laceration, but a large portion of these heal before the patient leaves her bed, and very many of the rest shortly after. It is very seldom an operation is necessary, unless the rent is in a transverse direction and has passed beyond the crown of the cervix. In most of these cases, especially where the rent has extended beyond the vaginal juncture, the intra-cervical membrane becomes everted. Its delicate membrane is exposed to the acid of the vagina which soon causes a removal of the epithelium. The contraction of the uterus is prevented which thus remains large and soft. The weight of the womb pressing downwards on the relaxed flaps, the whole cervix is at length everted, the internal os-uteri becoming the lowest portion of the organ. The best way to detect this condition is with a Sims' speculum, the patient being placed on the hands and knees. Of course in a case like this there should not be a moment's hesitation as regards the propriety of an operation, and there can be no doubt, as it regards the good results which will speedily follow. What I protest against

inter-meddling and unwise bringing into use the knife when the most mple forms of hygiene and general treatment are alone required. Let ırgery and therapeutics go hand in hand each with their own special ıties, both guided by intelligence and skill and neither infringing on the ther.

LXIII.

Against Vaginal Examinations with Speculum.

BY ALICE B. CAMPBELL, M. D.

The indiscriminate use of the speculum in vaginal or uterine complaints, :o be heartily deprecated by all thoughtful and conscientious members the medical profession. That such examinations are resorted to under :ious pretexts, too extensively, is very well known. Resorted to not ıly by the so-called "specialist," whose insignia of office should be a ,peculum and dressing forceps, but by others supposed to be more rational in theory, while their actual practice in the treatment of similar cases, differs merely in the numbers treated.

First class are "joined to their idols." We will "let them alone." But there may be others yet open to conviction, and if any utterances of mine can reach them I shall be more than content in having done that which brings its reward in the performance, for I speak from a heart burdened with a sense of wrong done to my sex. Yes, often actual injury received at the hands of the unthinking and careless practitioners of medicine.

The first proposition I lay down, while relating to every branch of the profession, is especially adapted to the subject before us, namely, surgical instruments should only be used as a last resort, and in dire necessity.

All the physical being revolts at the idea of contact with surgical instruments, the whole nervous system rebelling against their use, as if to defy art to bring about that reconciliation which it has never yet been able to effect. This we admit is the voice of nature. And if we are her handmaids, how can we reject her pleadings with impunity? For never more deeply is resistance felt and instinctively encouraged on the part of the patient than when in those diseases relating to women we would associate mechanical appliances with our treatment.

And is there no significance to be attached to the fact that a sense of degradation on the part of the patient, follows on such treatment? There should be no moral conflict between science and nature. It is very well known that women often refuse to consult a physician, and suffer on for years in silence, rather than risk even the possibility of an examination of this character.

No reference has been made to the sex of the medical practitioner, for notwithstanding it makes a vast difference, in these, as to whether the doctor be a man or woman—the preference being most naturally extended

toward the woman—nevertheless a deep and strong repugnance remains to attentions of this kind.

It was sympathy with this inborn repugnance, that first prompted woman to enter the medical field, with the hope of mitigating these trials to modesty. It is a knowledge of the reckless use of the speculum that is extensively practiced by both sexes, that has urged me to this paper. It is a conviction of injury done the patient, and of the comparative uselessness of the operation to the physician, that compells me to ignore such treatment. But beyond all this is a deeper motive. A sense of the sacred trust reposed in me. That I am committed altogether on the side of woman's interests. That all my efforts are to be in behalf of women. Therefore, and because I am a woman, I cannot advocate the unnecessary violation of that feeling which is a woman's sole protection against thoughtlessness and ignorance.

It may be answered that this is only another exhibition of woman's instincts. Granted, those instincts are universally credited with being correct as to the issue, if not logical in their deductions. The sequel of this first proposition then is, that whenever there is a conflict between nature and art, the benefit of the doubt should be given to nature, and the nervous sensibilities of the human beings over which we have charge, receive that degree of consideration which is only their just due.

The second thought, which affects the physician equally with the patient, is that results do not warrant the making of vaginal examinations with the speculum. In the preceding remarks reference has been made only to the mental and moral effects on the patient by this method of procedure. This second view of the subject presents the idea that the physical injury to most patients far overbalances any benefits which might otherwise accrue from these inspections.

The making of unnatural demands on muscular tissue, will always excite more or less reactionary effort, notwithstanding its elasticity and powers of distention.

Now, though a patient may submit, she cannot control the laws which control her, and a rigidity of fibre producing a contracted and almost impassible vagina,—and this is oftener the case than otherwise—it is impossible to presist in the introduction of a speculum, and not do harm. True, conditions may be classified, and this pictures but one class, but it may still be maintained that whether the speculum is urged against muscular resistance, or whether it rolls on its way over the relaxed folds of vaginal walls that have lost their tonicity, or the cruel substance grazes the hyperæmic and oversensitive mucous membrane, or is suddenly checked in its progress by the misplaced hypertrophied or otherwise diseased uterus, these examinations must be productive of more or less injury to the parts involved, and if often repeated tend to complicate the case.

In most surgical operations it is thought best, among other reasons, to benumb the sensibilities with an anæsthetic, that the unfortunate one may be not only unconscious of pain, but of all the shocking, though necessary, surroundings of the case. Here, in full consciousness, with the imagination in a most exalted state, often with an hysterical bias, a weakly woman, with an exciting conflict waging within her is expected to unhesitatingly resign herself to the demands of the medical attendant, and to

pass this ordeal in a manner that will be satisfactory to the doctor, and ultimate in a benefit to herself; but facts are to the contrary.

It is a very common tale, one that has been repeated to me many times, that the operation was a dreaded one. Attended and followed by suffering, and in many cases, I might safely say the majority of cases, requiring days and even weeks to recover from the effects.

Does this denote skill? Wherever art is an assistance to nature, rest and comfort follow, and if this method of treatment was one sanctioned by natural laws, there would be at least some compensation in the results, and some provision in the female economy for such an irritating operation if possibly it might be required.

These few thoughts, which might be elaborated upon, lead to but one conclusion, and point to the only justifiable course to be pursued by the sincere and worthy of our craft, namely, that vaginal examinations are seldom necessary, and with the speculum comparatively needless.

The readiness with which instruments are resorted to in all branches of medical art, together with the ruthless hands that wield the vaginal speculum, must have a tendency to lower the standard of surgery proper, and cast obloquy on that especial class of practitioners, surgeons. It is, therefore, insisted on what was advanced before, that the speculum should only be resorted to in dire necessity.

It is impossible to show just when that point is arrived at, as one physician will have more resources at command than another, according somewhat to the amount of inventive faculty each may possess or the fund of knowledge in reserve. But it is clear to an ordinary mind of honest perceptions, that there is nothing in the peculiar organization of a female, which demands this coarse and obtrusive method of obtaining a diagnosis in other than extreme cases.

Nature has guarded well her sacred precincts. We may go to certain lengths in our inspections of the organs of the human body. Beyond this limit we may not venture with impunity. And as we possess no warrant to extend our search further with one organ than another, any attempt to do so is met by a natural recoil which is our warning to desist.

When there is any lawful suspicion that a patient's disease is located in the uterine region and the descriptive statements, and subjective symptoms, which are readily obtainable by observation are not sufficiently clear to enable us to proceed to prescribe a remedy; or after holding a case for sometime we do not reach the ultimatum of success, we may then be privileged to make a digital examination with the patient in an upright position. With a well oiled and intelligent finger, we can obtain all the information required in the majority of cases. By this same means we may ascertain the pelvic dimensions, the capacity of the organs, the temperature of the parts, the consistency of the mucous membrane, the size, position, weight, texture, location and condition of the uterus. Also the presence and character of abnormal growths, and the quality and proportionate quantity of abnormal discharges.

This method is the one I have adopted, when believing it to be unavoidable, for the last ten years, with accumulating assurances of its thoroughness and superiority in every respect, as an aid in diagnosticating female complaints. But I am happy to be able to add that the necessity

of recurring to this aid becomes less frequent, as perceptions are quickened, and experiences enlarged.

It is not presumed that anything novel or original has been presented in this paper. The only design in declaring these principles, has been to encourage and strengthen the ranks of the few who have maintained and still hold this same position, with the vague hope that the many who differ from this both in theory and practice, may at least be led to think upon these things.

LXIV.

On the Probe and the Finger in the Diagnosis of Flexion and Malposition of the Uterus.

BY WALTER Y. COWL, M. D.

It is only since the conversion of the stiff and unyielding uterine sound into the delicate and flexible probe, by Marion Sims, of New York, that flexion of the uterus has become capable of diagnosis without difficulty and danger.

It is only by passing a flexible instrument to the fundus of the uterus, that we can be positive of the existence or non-existence of flexion, except in those cases where the bend is so pronounced, that the fundus presents itself in the anterior or posterior cul de sac, and where the curve is felt anteriorly by vaginal, and posteriorly by rectal touch. But this introduction of the probe simply determines the amount, position and direction of flexion, and the depth of the canal. It does not necessarily indicate the relation of either the cervix or body of the uterus to the normal position of the organ; it does not determine whether one or the other, or both, be out of line—*i. e.*, whether the case be one in which the body of the uterus is simply bent forward or backward (of ordinary anteflexion or retroflexion),—or whether there be an abnormality in the direction of the cervix, accompanied or not accompanied by an abnormality of direction of the body. From the fact that in a large number of uterine examinations with special attention given to this point, an abnormality in the direction of the cervix has been frequently observed in cases of flexion as well as of prolapsus, we are led to give the matter an unusual prominence and more especially as the condition is not to be observed by the use of the probe, easily discovered by the touch, if attention is paid to the point upon making the *digital* examination.

The last phalanx of the forefinger is placed upon the os and the face of the cervix; if these lie at a proper depth and squarely against the pulp of the finger, and if on running the digit up along the vaginal portion of the cervix, its direction is perceived to be at right angles with the axis of the vagina, the position of the cervix is normal. But if, on the other hand, the *end* of the finger comes in direct contact with the os and the face of the cervix, the axis of which seems to be in line with the finger,

a forward obliquity of the cervix (by far the most frequent abnormality in direction) is at once apparent. A backward deviation of the cervix, such as we find in anteversion, and in pregnancy, is very seldom observed with flexion of the uterus. It is, however, easily detected, by finding the os high up and pointing to the hollow of the sacrum. But of forward obliquity of the cervix uteri there are many degrees between the normal direction at right angles with the vagina and one in line with this canal—gradations of abnormality which are only to be diagnosticated by careful attention to the amount of angle between the finger in the vagina and the axis of the cervix. This point must needs be noted upon the digital examination, for the reason that in any case, except where the uterus is firmly bound down by adhesions, its position is very sure to be changed upon the introduction either of a Sims', a bivalve, or a cylindrical speculum.

The mere change of position from standing to lying, will not infrequently change the relations of the uterus to the other pelvic viscera to a considerable extent. It is unfortunate that we generally have to examine patients in a position in which any uterine deviation is apt to be least marked, as it is also least productive of pain.

For these reasons, and from the fact also, that manipulation may change the relations of the uterus to the pelvis, especially if dislocation be present (may even reduce a moderate prolapsus,) it is important upon digital examination to determine first of all, the position of the os uteri in the pelvis and the direction of the cervix, and after that the position of the body, (if perceptible), the consistency of the uterine tissue, the size of the organ, the state of the os, the flexibility of the pelvic roof, the mobility of the uterus, the existence of tumor, the presence of tenderness, etc., etc.

If these points be thoroughly attended to, upon the digital examination, the bulk of diagnostic evidence will have been obtained, while to the speculum there will simply be left the exposition of the mucous membrane and the more ready passage of the probe.

Although the caution, to carefully observe the position of the cervix, is generally unnecessary where an obliquity is very marked, yet even considerable degrees of deviation are easily overlooked. This is apt to occur where some other more prominent condition is also present and takes the attention. A proper and complete digital examination requires a thoughtful attention to each point wherein abnormality may exist, or else important complicating conditions will frequently escape us.

The importance of recognizing an abnormality in the direction of the cervix, in cases of flexion, is apparent when we reflect that the passage of the probe to the fundus does not of itself indicate the position of the body of the uterus in the pelvis, (owing to the change effected by the introduction of the speculum), but merely shows the depth of the canal and the amount, position and direction of flexion. The fact must always be borne in mind that it is this, *together with* the previously obtained knowledge of the position and direction of the cervix, which enables one to determine the habitual location of the fundus uteri.

If careful attention be paid to four points in examining the uterus, one cannot fail in making both a correct and complete diagnosis of the form, or forms, of deviation present. These factors are: First—The position of the os uteri, central, anterior, posterior, high or low, in the pelvis, *i. e.*,

either normal or dislocated downward and anterior, downward and posterior, or high and posterior. Second—The direction and position of the cervix in the pelvis, viz.: anterior and pointing forwards, posterior and pointing forwards, or posterior and pointing backwards. Third—The existence or non-existence of flexion and its direction, amount and position if present. Fourth—The depth of the uterine canal.

The former two ascertained by the digital examination, the latter two by the probe. The records of the gynæcological examination of somewhat over five hundred cases during the past two years made with especial reference to these four points, show very clearly that the idea which the study of text books on gynæcology is apt to convey, that the morbid condition is generally a simple one, is not generally true. The full diagnosis in fact is frequently multiple. This is especially true of the various forms of displacement—they frequently complicate each other.

Prolapsus, to some extent, is a very frequent complication of anteflexion and of anteversion, and to it is frequently due the severe symptoms suffered from. This is evidenced by the marked relief often afforded by a simple prolapsus or retroversion pressary, such as Hodge's, which naturally *increases* the anterior dislocation.

A combination of moderate prolapsus and retroversion is unusually frequent, although not usually so regarded. It is generally diagnosticated simply as a retroversion.

The mistake of omitting to recognize prolapsus when present, need never occur if, in the digital examination, the finger be made, first of all, to measure the position of the os uteri. The precaution will, at the same time, discover any forward obliquity of the cervix, which may be due to the prolapsus, to simple retroversion, or to a form of deviation quite frequent as a complication of anteflexion of the body of the uterus, or as a simple form of displacement, namely, anteflexion of the cervix.

The condition probably results from laxity of the uterine tissue and the influence of the vagina, normally at right angles with the cervix.

It is found more especially in those who have not borne children, and is often coincident with, or due to prolapsus or elongated cervix.

This same laxity of tissue which causes flexion, however, sometimes interferes with its diagnosis by the probe. In a number of cases where, upon digital examination, a marked angle was felt between body and cervix, while the probe, gently passed to the fundus, discovered no deviation, repeated examination confirmed the suspicion of flexion, and found that to an unusual laxity of the uterine walls was due the straightening on passing the probe, or even upon introducing a speculum. Straightening to a lesser degree, however, has been more often observed and especially with the woman in Sims' position.

These facts point to the necessity of a careful search for evidence of uterine flexion, upon digital examination, previous to the introduction of a speculum. The desirability, also, of diagnosis without a probe, in cases where there may be, from any reason, a suspicion of pregnancy, renders a careful search for flexion with the finger more obligatory. It may be stated as a fact, the truth of which experience will prove that flexion of the uterus, if present to any marked degree, can be diagnosticated without

the use of a speculum. A careful attention, however, will be necessary to the following points:

FIRST—Deep search with the finger in the anterior vaginal *cul de sac*, combined with hypogastric pressure (bimanual palpation.)

SECOND—Deep search of Douglas' *cul de sac*.

THIRD—The detection anteriorly, or posteriorly, of a receding angle, and on the opposite side of the uterus a projecting curve, generally located at the junction of the body and cervix. The discovery of a fundus-shaped tumor anteriorly, with an anterior receding angle, and a corresponding curve of the posterior uterine wall, will sometimes render a positive diagnosis of anteflexion possible without the probe. Finding an anterior angle and a fundus-shaped tumor alone will render anteflexion probable, while rectal touch (especially if combined with hypogastric pressure) will frequently clear up the diagnosis.

Retroflexion is not quite so susceptible of diagnosis without the probe, although a reëntering angle of the posterior uterine wall may be made out with great distinctness by digital examination, *per rectum*, or even *per vaginam*; this form of deviation is, however, an infrequent one.

FOURTH—The use of a probe without a speculum. This manœuvre, now that we are possessed of an elastic flexible probe, can, we believe, be accomphished without danger.

By this means a diagnosis is to be reached in cases where a speculum from any reason is inadmissible.

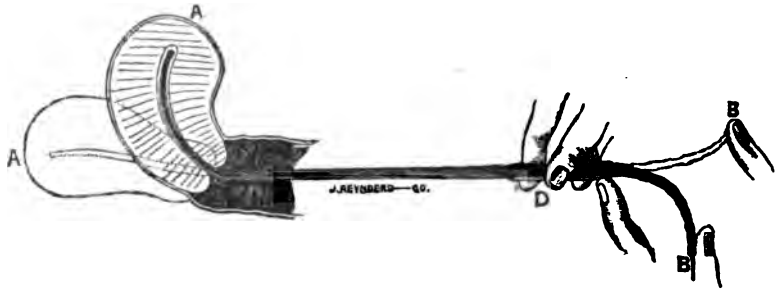
It amounts to an axiom in gynæcology that unless the os is patulous, and the exercise of the greatest gentleness be observed, a stiff instrument should not be introduced into the uterine cavity, (a proceeding sometimes necessary in the differential diagnosis of large fibroid tumors of the uterus from ovarian cysts.)

On the other hand any flexible metallic instrument—such as the best form of probe, which is made of pure silver, and very delicate and flexible—is incapable of introduction without using the speculum from the ease with which it permanently bends. A very light, properly olive-pointed whalebone, or hard rubber probe, however, can be passed in many cases alongside the finger, into the os and so on to the cavity of the body of the uterus, the curves of which it will follow by virtue of its *elastic* flexibility, and with but a very slight increase of force, which is governed and directed by the finger in the vagina. By this means the depth of the canal can be measured, and if the olive-point before introduction be bent with the aid of heat slightly to one side, it will indicate, by the direction in which the probe has to be turned in order to pass, the variety of flexion, if flexion be already probable from digital examination.

But it is by the use of a new and very ingenious instrument—the uterine sound and repositor of Jennison*—that an immense gain in the

*Jennison's Uterine Sound and Repositor consists of two closely coiled cylindrical springs of fine brass wire, one within the other. In the space between the two, and upon opposite sides of the smaller spring, lie two thin, flat and narrow strips of spring steel. The springs and steel strips are all firmly soldered together at each end. The middle of the instrument is encased in a thin copper cylinder, leaving one end of three and the other of four inches in length. A flattened revolving handle encircles the shaft near the shorter end. A glove of caoutchouc is drawn over each end, to protect the springs and to render the instrument more easy of introduction. When one end is bent in one direction, the other turns in the opposite one, with a curve extending to where

ease of detecting uterine flexion is made possible. By first entering the blunt point at the os, and then pushing the instrument, while the other end is bent, in the direction of least resistance, the intra-uterine extremity will follow whatever curve the canal may have. Force need not be used, although if brought to bear, it can hardly do damage.



When the instrument is introduced, the direction and amount of the flexion is at once indicated by the external end. The point in the uterine canal at which the bend occurs is readily determined by measuring the depth to which the sound penetrates without bending, and comparing this with the entire length of the canal. In practice the sound is grasped by a pair of dressing forceps at the point where it enters the os uteri, and extracted; the length of the free extremity is at once indicated by half inch marks upon the instrument. A simple method, however, is to cover but the first half inch of the sound with lubricant, introduce, extract, and note the length which has become smeared.

To recapitulate the positions taken in this paper, we would reiterate that the digital examination is far superior to the specular in diagnostic importance; that to it belongs the diagnosis of malposition of the uterus; that to the probe or flexible sound belongs the measurement of the uterine canal and the positive detection of the presence of flexion with its amount, position and direction; that flexion of the uterus, however, cannot infrequently be diagnosticated without the speculum, and sometimes without the probe; that by the use of a Jennison's uterine sound, flexions of the uterus can be easily diagnosticated with a single introduction of the instrument; that uterine dislocations are frequently complicated; that anteflexion of the cervix is not a rare condition; that flexion of a lax uterus may straighten out upon the introduction of a probe or sound, or even of the speculum; that digital examination may change the position of the uterus, particularly if prolapsed; and hence that uterine malposition should first be sought for in making the digital examination; and that moderate prolapsus is frequently a complication of other displacements of the uterus.

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the copper cylinder begins, this it does in obedience to the necessity that the steel strips (of equal length) shall remain parallel and yet joined at each end, thus, if one end of the sound is curved, the inner strip will fill a shorter arc than the outer one, which difference must needs be compensated by a corresponding and opposite curve of the other end. This curvation, however, can take place in but two directions, i. e., at right angles to the planes of the steel strips, a restriction upon its insinuating capabilities that is quite removed by the swivel handle, which allows the ends to be turned in any direction.

LXV.

A new Bandage for the Hypogastrium, its Uses and Advantages.

BY R. C. MOFFAT, M. D.

I claim for the judicious use and proper adjustment of this bandage advantages in certain ailments of the lower abdomen in females that we experience in strapping a broken breast when we would facilitate its healing. It is an important adjunct in treatment. Under various modifications I have used it for the past fifteen years, and in its present form for the purposes designed, I confidently recommend it to the attention of the profession.

The leading indication for its use is pain in the hypo-gastric region, or general debility presumably associated with uterine complaints. If the patient find relief by placing the hands below the hypo-gastrium and pressing upwards, the presumption is very strong that this bandage will be of service to her by aiding the action of her medicines. With this simple preliminary I state that it has served me in:

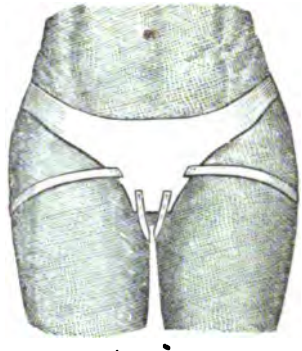
1. *Anteversion*, if not impacted, especially when of recent origin.
2. Many cases of dysmenorrhœa.
3. " " " leucorrhœa.
4. " " " pelvic engorgement.
5. " " " cellulitis, and,
6. " " " perimetritis (where the parts are not too sensitive to pressure.)
7. " " " lateral obliquity.
8. " " " simple prolapsus.

In short in all cases where the uterus or its surroundings are carried downwards and forwards to the discomfort in any degree of the patient. It is quite unavailing in *retroversion*.

The problem is to make equal pressure upwards and backwards under every varying motion and position, precisely such as the hands of the patient make, when applied to the hypogastrium as stated above, and this without subsequent injury to the patient or creating a necessity for its continued use.

The bandage may be familiarly described as a plain, unbleached muslin strap going round the hips just beneath the sup. ant. spinous process, so shaped in front as to cover the hypogastrium down to the pubis, and to fit the groin perfectly on each side. This is drawn as tightly around the hips as the patient herself can draw it, the central part covering the pubis accurately and never extending below it. Pinned at each corner over the pubis an inch wide strap of soft muslin, usually folded in three at the end, is passed backwards between the nates and thigh of its side around the thigh just over the great trochanter, and is firmly pinned in front on the margin of the bandage where it overlies the ovary of its side. This drawn firmly antagonizes its fellow of the opposite side and completes the strong yet unyielding support of the hypogastrium.

A glance at the subjoined figures will make this description very plain:



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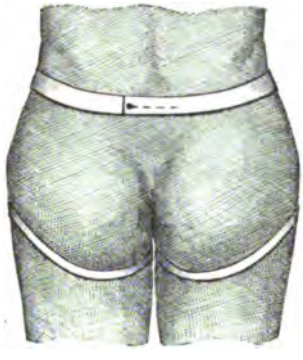

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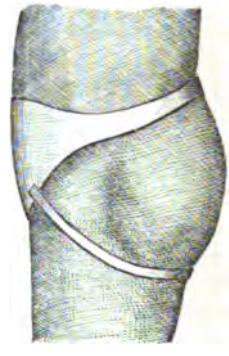

SIDE.

The advantage of this *hypogastric bandage* over every other appliance the writer knows of, are:

A. The facility with which it is made; it only requires accurately fitting the groin on each side.

B. The handiness of the material, unbleached muslin, which is cheap and always at hand in every household.

C. The perfect support it gives in every position and every motion of the patient; and when properly adjusted its entire freedom from pain of any sort.

D. It never creates a necessity for its continuous use.

It may of course be used night and day, but it is recommended for use by day only; but especially on occasions of unusual effort, as when on excursions, when shopping or protracted efforts of any sort, such as singing or speaking or domestic work.

Patients often sew the strip that goes round the person to the bandage or buckle the bandage at the back; but experience has shown that on the whole pinning is the best mode of fastening.

It should be made without hems or if there are any they ought to be proportionately broad lest they cut like cords.

LXVI.

Extreme Retroversion.

BY R. C. MOFFAT.

Mrs. C, aged 55, widow for thirty-five years, spare, blonde, mobile temperament, has borne one child and suffered much from uterine treatment. On Monday, after an ordinary defecation, she gradually experienced a distressing aching low down at the right side of the rectum which soon increased to anguish, when she found a swelling between the anus and the tuber-ischium of that side. Hoping for a spontaneous relief and encouraged by a partial subsidence of the pain, she deferred sending for help for several days. Meanwhile defecation and urination were normal, and there was neither heat, throbbing nor fever. The pain was easier on lying down but most tolerable on careful sitting. Diagnosing retroversion, (I was not called in until the trouble was of four days' standing, on Friday,) I requested an examination. Her person was spare, whence the "swelling" beside the anus was very manifest. The entire perineum was tender, but especially so to the dorsum of the finger as it passed the posterior commissure into the vagina. The vagina was a large open space, not narrowed above, nor was there any cervix-uteri. It had evidently been consumed by the nitrate of silver of her former physicians, and presented now only a narrow slit in the upper posterior part of the cavity. An endeavor to raise the uterus, by drawing the superior part of the vagina upwards and forwards failed, but produced no other pain than the backward pressure of the finger against the perineum. The next effort was to introduce the finger into the rectum and restore the womb to its place, the thumb cöoperating in the vagina. This seemed successful to a certain extent, but was defeated by the impinging of the body of the uterus against the sacral promontory in its ascent. It was excessively painful, and I was obliged to desist, promising myself and the patient a better result at a later effort. I prescribed Thuya. 3d, (one and one-half hourly) and external lotion of Hamamelis.

The next day I found my patient so far relieved that she declined any further examination; the swelling and the pain had both subsided, and it *then* appeared that the second manipulation, partly successful as it was, had really induced the restoration of the misplaced organ, which had taken place during the night.

LXVII.

Diagnosis in Gynæcological Diseases.

BY SARAH J. WHITE, M. D.

I have heard some physician say, "he did not care what a disease was called, if he only knew the symptoms." I think we can all sympathize with him in some way, only the getting at the "symptoms" is the very point that troubles us in many cases.

A dispensary practice among a class of people of many nations, has taught me that unless the doctor questions pretty closely, he is not likely to learn the most important "symptoms," and why they are kept hidden it would puzzle one to tell. That many can very easily make mistakes under these circumstances is not to be wondered at, but to do so with intelligent people for patients and every opportunity for examining seems to me a culpable neglect of duty, and yet some are so hurried or so careless that they fail to make the diagnosis, consequently to prescribe correctly or cure the disease. To illustrate: Mrs. O, age 36, mother of five children, one abortion; had been an invalid for several years, treated both homœopathically and allopathically; case pronounced one of great complication; organic heart disease, enlargement of the spleen, dyspepsia, etc., etc. Decided to try magnetism, and visited me to see if I could assist her. Before treating the lady, I subjected her to a thorough examination, and found her suffering from chronic cervical endometritis and that the other troubles depended entirely upon that for a cause. As she recovered from that, the others disappeared.

Case No. 2, also came to be magnetized; was the mother of seven (7) children and "had always been delicate," never well since the birth of her third child; had had two operations for rectal fistula, and had both allopathic and homœopathic treatment. Her case was diagnosed by her famly physician at time of my first visit, as rectal ulcer. As in case No. 1, I made a thorough examination and discovered anteversion; the cervix resting firmly against the rectum. After some six weeks treatment with Lyco. 12th, followed by Puls. 200th, my patient went to the country very much improved, uterus in place, the rectal pains, with mucous discharge entirely stopped; showing that all the trouble depended upon the anteversion, as there was no tenderness or pain existing there after the uterus was replaced.

Case No. 3. A married woman reported herself as menstruating for the last five weeks. Was a laundress and had been under the care of a dispensary physician, who told "her she might have a tumor, and she might have something else." Patient very pale, no appetite, could not walk across the floor without staggering, flow quite profuse. Examining I found the womb resting on the floor of the pelvis, about twice its normal size, and the os patulous; I questioned to learn if she had procured an abortion, but gained no proof that she had. Prescribed enemata of *hot* water with China 3d, and this followed by Sepia 2d, cured my case. I think these cases illustrate my point clearly. They were all diagnosed as something entirely different from the actual disease, consequently none of them were cured.

LXVIII.

Absence of Menstruation Terminating in Addison's Disease.

BY MARY W. NOXON, M. D.

Mrs. M., aged 42, never had menstruated, was examined March 25th, 1875. I discovered a fibroid tumor about the size of a hen's egg, in the cellular tissues between the rectum and vagina, located some three inches from the entrance; she then told me that a similar diagnosis had been made by another physician; objecting to an operation, she was put on Selicea^{200}, following up the symptoms with an occasional dose of Lycopodium^{200} and Hepar Sulp^{200}. Under the action of these remedies faithfully administered for twenty-two months, every vestige of the tumor disappeared. The following history of the case has been kindly supplied me by her medical attendant:

She says the patient's poor health dates from the serious illness of her husband five years previous to her death, at which time she had undergone great mental anxiety and bodily fatigue, and the whole train of symptoms associated with anteversion of the uterus which invariably disappeared upon the organs being replaced. While under uterine treatment a hard tumor about the size of a hen's egg was discovered between vagina and rectum, patient supposed it to be the remains of a tumor diagnosed soon after marriage, the tumor softened and disappeared within the following two years, and her health generally improved. During the winter of 1876–7 she suffered with throat and lung trouble, had been subject to slight attacks of bronchitis for many years. The winter of 1876 or 1877, about the time she was under treatment for bronchial irritation she was thrown violently on the back while walking on an icy sidewalk, and for several days suffered severe pain in the back, especially through the lumbar region; health remained poor during the entire winter. The following summer first observed a change in complexion, a sallow appearance with well defined pigmentary spots on the forehead, such as are frequently seen in chronic uterine diseases. She began to lose flesh, had occasional attacks of vertigo, constipation and depression, though naturally joyous and lighthearted. The same summer she was much benefitted by a trip to the White Sulphur Springs, Va. During the winter of 1877–78 her health was much better than the winter previous, the lung and throat trouble seemed to disappear, but the eyes became very troublesome; at one time she was unable to sew or read for two or three weeks. Complained occasionally of severe aching of tongue when talking, periods of distressing constipation and backache, although mingling constantly in a large circle of friends, and attending to all social duties. In the spring of 1878 she left the city and returned to her country home materially improved in health, and natural color restored. In the early summer was miserably depressed with occasional loss of appetite, nausea, vertigo, constipation, thin, but far from being emaciated, face and hands yellow with a sun-burned appearance, hands much darker than face, often complained of rheumatic pains in back and limbs; frequently had days of feeling well and energetic, and attributed her lassitude and other ills to want of employment. Pulse, temperature and urine normal. In Sep-

tember went on a visit to Boston and vicinity, took a severe cold on the journey, called Dr. Hedenbergh, of Medford, Mass., who thought her suffering from malaria. She improved in a few days, and was about as usual. Remained in this condition until the latter part of September, when Dr. H. was again called for nausea and general debility, she became sleepless, very weak, with dyspnœa upon the slightest exertion, with one attack of severe colic. After a few visits Dr. H. diagnosed the condition as Addison's disease. On October 5th, his diagnosis was confirmed by Dr. Woodbury, of Boston, the patient going four miles by rail to see him. Oct. 6th too ill and weak to leave her bed. Oct. 7th she dressed and was carried down stairs for a few hours, but was feeling very ill. Oct. 8th returned home, a journey of twelve hours by rail, said she felt better at the end of her journed than when she started. Had scarcely slept for four days and nights. Oct. 9th passed a restless night, very little sleep, distress and burning in gastric region. Pulse 88, weak, temperature 99. Noticed she moved constantly in bed, but was chatty and in good spirits, complained only of distress after food, frequently sat up and walked about the room, but grew very tired and breathless. Oct. 10th had a poor night but more sleep than the previous night, nausea and distress after food, continued; occasional sleep during the day which left her weak and feeling worse, not so restless as day before; in good spirits; interested in everything, walked about the room: pulse 80, temperature 99; bowels confined; tongue clean, hiccough during the day, attack of dyspnœa towards night. Oct. 12th very ill, retching and vomiting after food, constant distress in gastric region; during the day slept two hours, and awoke saying "she felt refreshed, the most natural sleep she had had for a long time;" pulse very weak, could not count it, temperature normal; in afternoon more quiet, appeared better, and looked much brighter; very little sleep during the night; sleep prevented by gastric disturbance, frequent micturition, passing little at a time, with burning after urinating. Oct. 13th, feeling very ill, frequent attacks of hot flushes, causing extreme restlessness; the least nourishment causes retching and vomiting; hiccough; a peculiar salty odor from the breath and general surface, constant desire to urinate, bowels confined; mind perfectly clear, but too ill to be interested; complained of hands and arms going to sleep; temperature normal; pulse imperceptible, rapidly growing weaker. Oct. 14th says "she feels very ill all over," retching and vomiting; no pulse perceptible; temperature 96½; nourishment by rectum; not retained; during the early part of the day two or three distressing attacks of hot flushes, followed by perspiration, cold surface; rapidly growing weaker; drowsiness in the afternoon; mind perfectly clear; complained of right thumb going to sleep, hand felt cold, left one warm; face cold; asked for Bryonia to relieve distress in stomach; a few moments before death raised her head from the pillow, said she could not see distinctly; breathing grew more labored, slight convulsive movement, died quietly at 7 P. M.

I was called by the family to see the patient on the evening of Friday, Oct. 11th, unhesitatingly confirmed Dr. Hedenbergh's diagnosis and requested consultation. A telegram was sent to Dr. Joslyn, who arrived at 3 P. M., on the following day, made a very thorough examination, and decided that the diagnosis was correct. There is but little to add save a

few items given by the patient's mother, and the autopsy made by Dr. McDonald. Her mother remembers her childhood as a remarkably healthy one, up to the age of seven, when she had measles, succeeded by scarlet fever, which was followed by inflammatory rheumatism; she was left with gatherings in the head, which produced partial deafness of left ear. At this time she was a patient of Dr. Gerscheidt, of this city, and for several years after he frequently treated her for enlarged lymphatics. With this exception she was well and a remarkably bright active child till the age of twelve, when from a small delicate girl she suddenly developed large features and frame; this transition surprised her friends on her return from boarding school. With this development appeared signs of menstruation, suffered the usual pains in back and abdomen; at the age of fourteen symptoms more marked and severe, spent three months at a water-cure, and each month was assured the menses would be brought about, but not the slightest discharge ever appeared. She continued to have these monthly attacks of pain till several months after marriage, when for four or five consecutive months she had a painful tumor on vulva, which gathered and discharged large quantities of a thick, whitish substance, which had the appearance of thickened yeast. She was married when nearly twenty, and with the exception of these monthly attacks, enjoyed good health, weighing 140 pounds. Sometime during the first years of her marriage she was examined by some of the most eminent physicians of this city who told her husband that she had a tumor nearly the size of a child's head. They advised leaving it alone, saying it might increase in size and prove fatal, or it might disappear. She afterwards traveled in Europe, enjoying good health and feeling no inconvenience from the tumor, exceipt weight on walking. Several years ago while with her husband in the mountains she was alarmingly ill with what she supposed was inflammation of the bowels, beyond the reach of a doctor, she treated herself from her homœopathic book and box, and made a good recovery. With this exception, and the vulva tumors, she had no illness which confined her to the bed during her entire married life, a period of twenty-four years.

Autopsy made by Dr. McDonald, Oct. 16th, there being present Drs. Joslyn, McEntee and Noxon.

Lungs, pleuritic adhesions in both apices, fibrous consolidation and calcareous deposit in apex of left one; hypostatic congestion of inferior lobes of both lungs; slight evidence in apex of cured tubercular disease.

Heart, weight seven ounces; ventricles materially diminished in thickness; aortic valves in good condition.

Liver, weight one and three-fourths pounds; largest dimension eleven inches; left lobe particularly soft and lax.

Spleen, weight one-fourth of a pound.

Diaphragm attached over the external surface of left lobe of liver.

Gall duct. 3½.

Pyloric orifice same thickening with extravasation under gastric mucous membrane.

Peyers patches, deposit thickening and injection in one, with simply deposit and thicking in another.

Kidneys, small amount lobulation, and in one or two places the cortical

substance was stripped off with capsule; some wasting of cortical substance; supra renal capsules adhered to capsule; surface hard and nodular and nodules show internally in shape of tubercular lumps; granular substance from size of a shot up to a small pea; *right kidney* extra production of capsule, more caseous degeneration, more atrophy of cortical substance.

Uterus and *vagina* normal in size; small fibroid attached to the superior margin of the cervix.

Ovaries undeveloped, representing them two cysts about the size of Sicily oranges containing a serous fluid.

LXIX.

Acid and Alkaline Children, as Indications for Food and Remedies.

By T. C. Duncan, M. D.

Said a professor the other day, "If you will only give us your ideas of Acid and Alkaline children with the indications for food and remedies in a few pages for ready reference, you will confer a favor." I explained that he would find that in my books, especially in the one on "Feeding and Management of Children." "Yes, I know, but we want it in a separate form where we can get at the ideas and directions without much reading." Since 1873, when I presented this subject to our State Society, the practical value of this division of children has been recognized by our best men. Said a prominent physician, who is recognized as a close prescriber: "I am classifying our remedies on this basis, as I find that it facilitates their selection. I wish that you would carry it out farther. Listening to these suggesitions I do not know that I could give you anything more practical.

Let us briefly recall the outline of this division as already published. At a subsequent meeting the ideas will be farther illustrated.

ALKALINE VS. ACID CHILDREN.

When called to treat a child, one of the most important questions I settle, is whether I have an Alkaline or Acid subject to manage. Such a division of our children cases may seem singular, and possibly visionary, but let us glance at the natural history of the body and the changes it undergoes—the result of the working of human nature's laboratory. It seems that in a healthy child, first, the Alkaline digestive elements are in preponderance, then slowly the Acids obtain sway, so that when the child reaches manhood these elements hold the ascendency. In a normally, healthy person these steps should be retraced and we have an Alkaline aged body.

First.—Let us see if this is not true at least of the infantile part of life. If we go on a voyage of discovery down the alimentary tract of an infant, the first stream we meet of any size and activity is the biliary; the sali-

vary glands and pancreas, the stomach and intestinal glands are not yet called into activity to any great extent. The chief glands are the secretory liver and the assimilatory lymphatics.

The liver, as you well know, occupies more than a third of the abdominal canal. The stomach is tilted up under the ribs on the left side and the circular fibres of this and the intestines are chiefly developed. The sack-like duodenum is quite as important as the stomach. The amount of the work of the liver is enormous, as the bile has to emulsify the large amount of milk taken by the child to get it ready for absorption.

This bile is an Alkaline secretion, and it gives alkalinity to the whole system, and this alkalinity is, or should be, present for many years. Acid and cold are the infant destroyers. The bile is chiefly composed of the *Cholate* and *Choleate of Soda*, *Bileverdine*, *Cholestrine*, etc. When the soda is removed artificially or accidentally, as in disease, we have then two irritating acids, *Glycocholic* and *Taurocholic* Acids. *Cholestrine* is the debris of nerve fat, and no doubt aids the emulsifying of the milk fat. The *Bileverdine* gives color to the bile. The infant's food we know is normally Alkaline in character: Butter (Oil), Caseine and Sugar of Milk, with Salts of Potassium, Soda and Lime.

The next set of glands that come into activity are the salivary glands and pancreas. The juices of these both give an Alkaline reaction. The base of the saliva is *Sulpho-Cyanide of Potassium*, but what gives the pancreatic juice its very strong Alkaline reaction is not known as yet. Thus we see in the next stage of the child's life, the two added secretory glands give Alkaline products as if to ensure its best health during that most trying of all periods, the teething period. It is found by Prof Sonsino that a child cannot completely digest starch until over ten months of age.

The next epoch in the child's life is when it is enabled to take and digest meat. And now we find the liver relatively smaller, the stomach now lies more horizontally, its transverse and longitudinal fibres are better developed, the gastric follicles are also better developed, and the amount of *Chloro-hydric Acid* secreted increases as age advances. The intestinal juices become more and more acid. To correspond to this change the mother's milk becomes more salty. Finally we reach the period when the stomach is the chief digestive organ in the body. This is the natural order, but it may be easily changed or deranged at any point and serious results always follow.

We see that, chemically speaking, the healthy child is Alkaline; most Alkaline. Externally it presents a plump, rosy appearance, feeds heartily, sleeps a major portion of the time, and wakes to crow and laugh. It is hearty, healthy and happy, and would grace the arms of any proud Madonna—a pleasing subject for an artist's pencil. It teeths easily and develops without a struggle. It has been my fortune to make an autopsy on some of these healthy and wealthy (in fat) children that have died suddenly from meningitis, overlying, or from a bottle of sour milk. The stomach is still small, the lesser intestines narrow, while the liver and large intestines are still, also, large, healthy and capacious, and every part is well cushioned with fat, stored up for the great demands upon the system.

The Acid child is quite a different subject; whether the acidity is induced by the first dose of sweetened water, or subsequently by negligence, thin milk or dandling, the result is the same. It is thin, scrawny, cross, and sours all those who have to care for it, and ruins the reputation of all babydom. It nurses, or would nurse constantly, cries and squirms incessantly, vomits occasionally, and its bowels are always out of order. Its teeth are cut with difficulty, its intestinal irritation is interpreted as worm-symptoms, and it is often the victim of vile drugging. It is a life-long invalid, and every one feels that it is a mercy when it is gone, whether this is in infancy, during teething, at puberty, or at maturity. The post-mortem appearances of an acid child are the opposites of the alkaline child. The stomach is large and usually distended with food, the liver shrunken, the body is anæmic, while the absence of fat everywhere is noteworthy. The brain is especially anæmic and shrunken.

SECOND—There is a diseased alkalinity as well as diseased acidity. The tendency may be to too much fat; the system may be clogged, giving a feeble bony and muscular development, thus rendering the child a prey to disease, but still of another class with different symptoms.

The tendency of disease in the fleshy alkaline subject is to catarrhs, effusions and exudations, while in the lean subject, it is to inflammation, anæmia and consequent structural derangements. The fleshy subject's diseases are those of the excretory organs, while in the acid child the secretory glands suffer most.

The brain diseases of the former are chiefly ushered in with coma, and developed with effusion, viz., meningitis, hydrocephalus and the like; while in the lean subjects, restlessness is the first symptom, and this is followed with structural change, chiefly anæmia or inflammation of the structures. The indications for the remedies are also different; in the first we would think of *Arnica*, *Opium*, *Apis*, etc., while the latter would suggest *Bell.*, *Sulphur*, *Arsenic*, *Zinc.*, etc.

In the throat and chest diseases of the former, we have chiefly croup, inflammatory and membraneous (fibrinous) and capillary bronchitis; while the lean subjects give us spasmodic croup, or diphtheritic croup, (albuminous), and more nearly inflammation of the lungs. The remedies here also differ; *Hepar.*, *Kali.*, *Tart. em.* stand out prominent for the chest diseases of the first class; while *Aconite*, *Spongia*, *Bell.*, *Bry.*, *Merc.* meet more nearly the conditions in the second class.

The bowel symptoms of the first class are chiefly constipation, or there is a profuse mucous diarrhœa; while in the second class, colic, inflammation, green stools are the chief symptoms. For the first, *Alum*, *Calc.*, *c.*, *Kali.*, *Pod.*, etc.; for the latter, *Cham.*, *Bell.*, *Merc.*, etc.

The tendency in the first is to a moist skin, crusta lactea, pustular eruptions, etc., while in the lean subjects the tendency is to a dry skin, furfuracious or papular eruptions, etc. *Hepar.*, *Silicia*, *Graph.*, will meet the first, but *Ars.*, and similar remedies will be needed in the second class.

Thus we see that the same disease will present different varieties of symptoms, demanding, of course, very different remedies. And this rude division gives us important hints. But no where is this division of such practical importance (to me) as in the selection of the diet.

Diet.—To bring a slender acid child to an alkaline (healthy) condition, we will first look at the difficulties, supposing the child is nursing. If the mother is fleshy, the milk of good quality and quantity, time will regulate the trouble, only look out for disease. If the mother is slender, thin and active, preferring acid articles, tea, pickles, tart fruits, lean meat, (which demands *Hydro. Chloric Acid* to digest it) we must regulate her diet or have a sickly child. How shall it be done? Here is the Law of Diet.

RULE I.—ACIDS, SPICES, STIMULANTS AND ACTIVITY

Interfere with the fattening process by stimulating an excessive flow of gastric juice, Hydro-chloric Acid, etc.

RULE II.—FATS, SWEETS AND STARCHY FOOD, QUIET AND WATER

Increase the activity of the liver, pancreas, salivary and lymphatic glands. They give rise to the apperance of fatness by increasing the white blood etc. It is, perhaps, as I hope, needless to argue about the value and necessity for fat, it being everywhere in the system. Like water, it is a vital element.

If the mother is too fleshy the milk will contain too much fibrine (caseine) due to her excess of white blood, Mantegazza found that fibrine was produced by the white blood corpuscles. The milk will form large curds like cow's milk—acidulous food will correct this.

If the mother is very thin, we must exercise great skill and care to conduct her up the fattening way. It will be necessary often to begin with starchy food, and go up gradually to fats, as a case will illustrate.

Mrs. ———, nursing a twelve months old child. She is thin, has cough with profuse green expectoration, headache, palpitation, constipation, leucorrhœa, profuse and green, urine scanty and high colored. Her diet was clear tea and bread. Did she drink water? "No." Milk? "No." Ordered milk with cracker, soups not fatty at first, bread and tea with much milk. Her tea was too much of a prop to be suddenly removed. For drink, water and milk with a pinch of salt in it, as it absorbs better. Gave *Sepia*, the indicated remedy, and the improvement was remarkable. She became plump and vigorous.

Another remarkable case was a Norwegian, tall and slim, weight about 100 lbs. Had hæmorrhage from lungs and was fast running down. Prescribed *Phos.* and fatty diet: milk, eggs, water, oatmeal, gruel, etc. Now fleshy and well. Pork fat, because it easily oxydizes (becomes rancid, acid), is an objectionable fat.

Mrs. ———, age 40, tall and slim, weight 100 lbs., phthisis diathesis, and had severe post-partum hæmorrhage. Put her on liquid fattening diet, and now she weighs 140 lbs., and healthier than she has ever been.

Mrs. S., active and slender, mother and child acid. It cries, worries with colic. She has scanty milk, thin, and it is failing. Tried to regulate diet, but could not get her to eat as directed. Then ordered child fed part of the time, and by this supplementary fed the child; both mother and child are doing well.

If we understand these rules in their full import and know our case, it is an easy matter to help these cases to health without groping blindly.

If bottle fed, how shall we select the food, as a bottle of sour milk, or

any sour substance, in sufficient quantity, will kill very quickly. Examine the milk to be used. Alkaline milk has large fat globules with thin walls which are easily digested off. If nearly neutral and watery, the fat globules will be few and far between, have thick walls, shrunken and have lost their fluidity. This milk may be considerably changed to suit the child. A fleshy child will take care of the fatty (rich) milk, but the thin milk may need to be heated to drive off some of the water. For a lean child, the fat milk must be diluted to suit its delicate, absorbent system. This can best be done by adding sugar to boiling water, forming a sort of syrup, then add the milk. This makes a nourishing and an assimilable food. The syrupy water swells the globules. A fat child can the *sooner* be put upon starchy food, the salivary glands being better developed than those of a lean child. A lean child can the sooner take sweets and lean meat.

Children should be kept on mild diet part of the time for several years. They should never lose their love for milk, soups and liquid fattening food in this dry climate.

If a child is very acid, (i. e., thin) milk may not agree at all, as is found in some cases at the Foundling's Home, Chicago. Here, of all the artificial foods, that of Ridges proves the best. I can only explain it on the ground that it contains a little soda, which supplementing the bile soda aids digestion, and the child thrives. A little soda (about a grain to a pint) might be added to the milk, we presume, to aid digestion, if we are satisfied the trouble is from the biliary acids.

We often meet a greater trouble with children after weaning. They seem to go down the chasm between mothers' milk and assimilable food. A case will illustrate. Father consumptive, i. e., feeble glandular absorbent system. Mother cancerous diathesis, (scirrhus of right breast) milk was thin and fibrinous, (caseous) child, seventeen months, cutting first bicuspid. Had been weaned recently, but was failing for six weeks before. No absorption of food, tabes mesenterica (enlarged, obstructed, absorbent glands). It ran down to stupor in spite of all diets and remedies. I thought it must die. I now gave *Opium*, and in studying the case it occurred to me that the condition of the digestive system was intensely acid (the stools were past green, they were brown), same as in any low disease where are indicated *Nitric acid*, *Sulphuric acid*, *Muriatic acid*, etc. This reflection led me to select raw beef, as it would only take a few sips of warm milk. This pulpy beef, with sugar, it devoured like a dog, whose alimentary condition it resembled, and it picked up on this alone for two weeks, then it took some starch, and cautiously egg, and finally milk. In three weeks it became so alkaline that the beef passed undigested and was gradually omitted. The chief remedies were *Ars.* and *Hepar*. It is now plum.

Attrition Flour, or whole wheat flour, at this stage of child life, will, I believe, prove as great a blessing to American children as oatmeal is to British children. Attrition flour, from the best American wheat, made into gruel or biscuit, and fed with milk is very palatable and nutritious to a teething child, and especially during this transition period.

Cleanliness is an attribute that the child should be familiar with. The insensible perspiration carries off much Carbonic acid and other debris,

and the pores of the skin should be opened every day by washing. The child may be washed to death, or smothered with dirt. The child should be moderately fleshy and on the average clean.

Clothing.—A child should be warmly clad till well on towards active years. Nothing stunts the growth of both plants and children like cold. Cold produces a stasis of both circulation and function. A nervous active child can stand the cold better than a fat child. The activity of the body generates heat. As cold and acids are infant destroyers, so warmth and alkalinity are infant savors.

Drink.—Children, like plants, want plenty of water, and it should be water, not tea or any mixed drink. As ninety per cent. of the body of a child is water, it should get its full allowance of this vital fluid. Children flourish best in a moist climate, as in Great Britain, Canada, Germany, etc., while in dry France and America the rearing of infants is very difficult. Not because there is a lack of the milk of human kindness, nor any other kind of milk, but because of the climatic conditions above referred to.

These facts I have gleaned from many sources and woven together for the benefit of myself and my young patients, and I trust and believe they will prove of equal benefit to you.

LXX.

Notes on Chronic Gastritis in Children.

By T. C. Duncan, M. D.

This is one of the most neglected forms of infantile disease. It is hardly recognized by the profession. The trouble is laid at the door of teeth or the liver, or indigestion. The other day I was consulted by a mother whose child had, in the opinion of her physician, frequent attacks of trouble with the liver. How old is it? was the quiry. "About a year old." How much does it weigh? "About eighteen pounds. It looks thin except its face, which is the best part of it." That one symptom "the face is the best part of it," has come to be recognized by me as diagnostic of chronic gastritis. How do I explain this anatomical peculiarity you may ask. With gastritis there is always acidity more than usual. Acidity causes a rush of blood to the head. This causes a full face and a large head. This rush of the blood to the head in infancy gives us what is known as acquired Hydrocephalus, if it is very severe and persistent. I was not surprised at the next statement of the mother, that the child was restless, nervous and irritable, but it slept well, and did not have cold hands and feet, therefore I concluded that it was not as severe as it might be. Does it belch wind after feeding? "Yes, always, and it starts in its sleep and belches wind." Here we have a picture of what would be called indigestion. True, but why is there indigestion? The child was plump when born, is fair, has light hair and blue eyes.

Does it belch sour rancid food or water? We want to see where the trouble is. "No, it spits up a good deal, a mouthful or two after eating." Therefore, there is no trouble in digesting fats, as we might expect from the light complexion. The belching of a mouthful would locate the trouble in the stomach and with the food. I inquired if the food is well salted. Lack of salt would mean lack of Hydro-chloric acid in the gastric juice. Not till recently did she salt its food. Since then she had noticed it had not belched so much. It had just recovered from an acute gastritis when she put it upon *Arrow-root.* It was now on Ridge's Food. She said its tongue was red on the edges, with a light coat over it, that means Anæmia. I informed her that her child had a mild gastritis that had lasted for a long time, and that *it was starving.* "That is just what I felt," she exclaimed. I suggested to change to Neave's Food. To give it a dish of oat meal porridge at 10 A. M., and a crust of bread after its 1 P. M. meal. In two or three days give the oat meal twice a day, and then gradually allow it to feed more at dinner. It was constipated. This is a symptom that would differentiate the case from gastric catarrh.

The change in the food I expect will revolutionize that child, and that it will gain one-half pound a week instead of "half that a month," its present progress. The remedies that suggested themselves, were *China, Bell.* and *Nux vom.*

The pale face, belching after eating, would suggest *China*, while the starting from sleep would point toward *Bell.* But the constipation, the distress after eating and the fact that a change in the food was to be instituted settled the choice upon *Nux.* Chronic gastritis is one of the most frequent diseases of infancy, and it is *the* one of all others not recognized.

This case was under the care for months of a skillful Homœopathic physician, who attributed the trouble to its liver, and persisted in the use of Ridge's Food.

I have chosen this case with its few salient points of diagnosis rather than attempt a systematic paper on chronic gastritis, for practicians remember better when subjects are presented clinically. I have chosen this subject partly to make amends for a very serious omission in my work on "Diseases of Infants and Children." At the time (two years ago) it reflected the best knowledge on the diseases of the stomach. I smile now as I read what Smith says about gastritis in children being rare. Acute gastritis is common enough. Gastric catarrh is very often to be found. Gastralgia (colic), what is more common. Gastro-enteritis, what is more common in summer? Chronic gastritis is the most serious of all. Not because it is so fatal as gastro-enteritis, (cholera infantum), but because it interferes with the development of the body, and is the occasion of more trouble and anxiety to the attendant than any other disease in the whole catalogue of childrens troubles. I have tried to sketch it in the little work, "How to feed Children to Prevent Sickness." In an address before our State Society I tried to bring out the salient features of chronic gastritis. (This you will find published in the *United States Medical Investigator* for 1879.)

I commend this subject to the investigation of this honorable body of scientific physicians. It is a comparatively new and unexplored field, and

it will be an honor to our school to be the first to elaborate the subject in all of its practical details.

Chronic gastritis, I believe, to be responsible for much of the (so-called) physical degeneracy of American children and people. Queer that it should have escaped our attention so long.

LXXI.

A Short Plea for Cross Babies.

BY ALICE B. CAMPBELL, M. D.

No class of patients is more at the mercy of inefficiency and stupidity than the miniature representatives of humanity called babies. Unable to give intelligent expression to their many and varied feelings, helpless to defend themselves against the mistaken advances as often of foe as of friend. Their wants as often misinterpreted, as otherwise. Their needs less frequently consulted. And this with a most disproportionate degree of endurance and forbearance expected of them. The fact is, there is less justice done to babies, than to any other class of living beings.

So universally is this truth verified, that over all the world the "silent cities of the dead" would be but sparcely tenanted, but for the millions of aborted infant lives that have been sacrificed to injustice and ignorance. In this age, when there is such clamoring for the rights of the different strata of society, the claims of this one class, the very foundation of all classes, should not be lost sight of nor their welfare disregarded. Particularly when their physical good is concerned. Therefore, it may not be improper at this time to attempt a defense of the Liliputian portion of the population, in relation to a much abused term often applied to them and which has tended to cast odium on their defenseless heads, the accusation of "crossness."

The common misconception of the nature of this charge is where the trouble lies, and is a reflection on cultivated intelligence, and concerns physicians, they constituting the tribunal before whome these petty offenders are generally brought to have their cases adjusted. Arranged on the weaker side, I deny the charge, and declare, that in the common acceptance of the term there is no such thing as a "cross baby."

To establish my premises it will be in order to define the word cross, and also to have it understood what constitutes a baby. Cross is given in the dictionary as "peevish," "easily excited," and were the community given to accept words at their true value, there would be less confusion in the world. Then the adjective cross when applied to a baby, would convey a more correct idea of the condition which called forth the term. *We* cannot, however, justly complain of laymen being loose in their use of parts of speech, while the medical profession continue to encourage them in such appellatives. This may seem to be fastidiousness, but is it not well to be always technically correct? When a child is said to be

cross, the common idea conveyed is that the depravity of its nature is being made manifest, that it is vicious, and aims to destroy the peace and comfort of all with whom it has to do, and as a consequence the little culprit is deemed worthy of chastisement. This being the general sense in which the term is understood, the appropriation of this trite expression of a physician to convey the true nature of the case, tends to a discreditable reflection on the judgment of the M. D., and at the same time is a specis of injustice to the little patient.

SECOND—The baby. We can do that up in small wrappings? A baby is a being having do intelligent consciousness of itself or its actions. We naturally incline to limit this state by time, but that is impossible. As many of the characteristics of the baby are retained a longer period with some than with others, and with a few are never entirely obliterated as years increase. This presents the baby as a helpless, irresponsible mortal. Unceremoniously ushered into the world with very often uncongenial surroundings, no one capable of extending genuine sympathy, because no one can know just how a baby feels. And was it not for the kindly element in the physical web enveloping them, which admits of adaptation to circumstances, there would be fewer babies and less of joy in the world. For it is plain that more come up to years on their own inherent merits, than for any outside aid. This, however, does not lessen our duties to them, while the baby stands acquitted of malice, prepense, or conspiracy against the family peace.

All this prelude may seem trivial and irrelevant, yet nothing is more common than for babies to be looked upon by those having the care of them, as under satanic influence when giving expression to their different states of feeling, and to the demands of their nature. Through this ignorance and misconception of the peculiar requirements of the little being, much wrong has been wrought on both the bodies and minds of thousands whose health and characters have been so distorted that not a trace of the original innocent remains. Now though morals may not strictly belong to medicine, there is no antagonism between them, and they may be often given as an adjuvant in the administration of a drug, and with the expectation of being accepted, as people are more inclined to take advice which they pay for. Accepting the word in its proper sense, what is to be done when juveniles in such state are brought to us? For a cross baby has baffled the skill of many a medical mind. We know how much depends on the quality of care a child receives. And in order to secure the desired succes, it is but fair to the little patient, that it be required of those filling the place of nurse, to understand, that the varied expressions of the different emotions on the part of the child, are not exhibitions of bad temper, and are our most reliable indications for treatment. We are the ones to teach the people that the most likely cases are those giving active vent to their discomfort and uneasiness. That less promise attends those states where there is neither power nor sensibility to make known their wants. That the exercise of gentleness and patience towards the helpless, though exacting little ones tends to produce a soothing effect on the excited nerves of the child, while developing their *own* better nature.

For until the custody of children is received in the right spirit, and a just estimate of the power vested in guardians to make or destroy the

health and happiness of their children, is sufficiently realized by them, we shall continue to have cross babies, with distorted health and characters.

A few words in praise of homœopathy as bearing on the class of patients before us.

The opponents to this system often utter in derision that which really sets forth its greatest value. That "homœopathy is good enough for children." If we can treat children successfully, we need not fear to attempt other patients of greater size and weight.

If there is one cause above another for thankfulness in the hearts of intelligent mothers of the day, it is for the pleasant little dose which the child unhesitatingly swallows, and the salient but mighty power which that dose contains. And never does homœopathy shine with more brilliancy, than when it transforms a cross baby into a contented and comfortable child.

Acute attacks of crossness, springing from some accidental or temporary cause are more speedy in reaching a crisis, and however dangerous to life the condition from which they arise may be, are more easily met, and more satisfactory to treat than those chronic manias engrafted on some constitutional disorder. How often the still small voice of homœopathy has whispered peace to the distracted nerves of the little sufferer when tossed by disease on the waves of unrest. How often the vital principle of a well chosen drug has revolutionized the entire being of a leuco-phlegmatic or otherwise tainted child, and like the pebble in the brook changed the whole course of the stream of life.

Homœopathy has gained more adherents to its principles, and done more for the comfort and happiness of home, and as a consequence to the world through the children than by any other channel.

While cross or otherwise deranged children are the most difficult cases to diagnose with certainty, they are the most honest natures to deal with and quickly respond to proper skill. This proves that nervous irritability in children, whatever form it may assume, is never manifested without an adequate cause existing somewhere in the body. Believing this ourselves we would assist our cases, and befriend our little patients by endeavoring to impress on the minds of those having them in charge, that crossness in children means a departure from the correct line of health, and that a baby is *never* cross without a cause.

LXXII.

Report of Cases of Cerebral Complications in Infancy.

BY GEORGE H. SEYMOUR, M. D.

The frequency with which we are called upon to meet a cerebral complication in treating the diseases of infants, leads me to report a few cases of the many which have occurred in my own practice during the last eight years. We all have learned of how great importance to the advancement

of homœopathy, is the successful treatment of the diseases of children. How frequently we hear it remarked, even at this late day, "It will do for babies," the contemptuous speakers not being cognizant of the fact that it is more difficult in some respects to prescribe homœopathically for a child than for an adult, because we do not have the subjective symptoms to aid us, but have to depend upon the objective, and they in part, only second handed. As I am fond of children, I have felt a great interest in the cases coming under my care, consequently I have gradually acquired the reputation of being the "baby doctor." Very well, we as homœopaths, can stand that, as it brings us in close sympathy with the parents, (mothers especially), and sooner or later we gain their entire conversion to our faith. Some of the cases reported were, under just such circumstances, when the parents thought Morphia, etc., were a little too strong for the infants, and that they would try "little pills." You can imagine with what anxiety these cases have been watched, and I have it to say that in the whole of the eight years, I have lost only the one case, and that is reported. I never have been satisfied with the result in that case, for I was unable to give it careful prescribing. With such a result as a record, I report a few cases, hoping I may give encouragement to some which shall lead them to a careful prescribing for all similar ones; discarding all mere palliative treatment, as not only a waste of time, but sinful; for the life of the little one at such a critical time, rests in the hands of the physician. I only regret that these cases are reported from memory, I not having taken notes of them at the time, for which reason, I am often unable to give the finer discriminations in the selection of the remedies, and which are absolutely necessary to be made in prescribing for such cases.

CASE FIRST.—Rev. Mr. M's daughter; aet two years. In the latter part of summer commenced with bowel troubles. Parents thought it to be teething diarrhœa. Did not call me until after the disease had made some progress. Meningitis soon made itself manifest. At first gave at different times Bell. and Gels. for the cerebral complication; but it rapidly progressed to marked indications of effusion. The symptoms called for Hel. Nig., being the automatic motion of right arm, left leg—white mucous watery stools. Keeping it steadily under its influence, improvement in the cerebral symptoms soon became manifest as well as in the character of the evacuations. The child soon commenced having marked bronchial trouble, accompanied with a severe cough. Diarrhœa still continuing but different in character, high fever, etc. Remedies called for were Phos., Phos acid and China, which were given at different times with an occasional dose of some other remedy, as it seemed to be called for, such as Cal. Carb., etc. The child made a good recovery, and is now quite a healthy girl of some ten years of age.

CASE SECOND.—Charlie, aet one and one-half years. Had teething diarrhœa; received treatment, became better; was taken to Fair Point with the family. The nights were cool and damp; the child took cold; had cholera infantum, vomiting and purging very profusely; number of passages were as high as thirty-six in twenty-four hours. The trouble was accompanied with marked disturbances of the brain in the beginning, I believe there was some meningitis. Acon. and Bell. were

the main remedies used at this stage with reference to the cerebral symptoms. The case was studied with the greatest case that our worthy President as counsel, Dr. Childs, of Akron, O., and myself could give. Each dose of medicine given was selected after prolonged study of the symptoms, and a careful comparison made between them and the Mat. Med. After about two weeks the child rallied so that he was brought to Westfield. I continued the treatment on the same principle as before, now being able to be with it every day and night. I well remember carrying the little fellow for two and one-half hours one night, before I could lay him down, or that he would allow any one else to take him. The temptation and the pressure were great that I should resort to some palliative, but I could not conscientiously. Lyc., Cal., carb., Argent Nit., etc., were remedies given. The latter was one that made a marked impression in his case. The symptoms calling for it, were: Stools of *green mucous frequent and very fetid*, aggravation occurring *after midnight* accompanied by the emission of much noisy flatus. *Great desire for sugar.* The little fellow had a very obstinate cough, accompanying the other troubles. His mother has since died of tuberculosis, but he still remains quite healthy and a very bright boy.

CASE THIRD.—Willie, aet about three years. Catarrhal fever, or influenza, accompanied by meningitis, Acon., Phos., Bryon. and Hyos. were given with good results.

CASE FOURTH.—Ella, aet two and one-half years, similar to case three, was very much afraid and very fretful. Acon., Cina., Phos. and Hyos., were given. Case did well.

CASE FIVE.—Eva, aet two and one-half years. Bronchitis accompanied by meningitis; fever very high; very severe, dry hoarse and harrassing cough, suppressed as long as possible, on account of pain given. Indication for Phos. which was given. Fever very high, much afraid of all persons coming near. Would also imagine she saw frightful objects, and would cling to mother most tenaciously. Later had grasping at flocks, picking at bedclothes, some opisthatonos, unconsciousness and retention of urine. Gave Hyos.; made a fine recovery.

CASE SIXTH.—Helen, aet about two and one-half years. Very similar to case four. Hereditary tendency bad, all other sisters having died at about same age, from brain trouble, had catarrhal fever, was exceedingly peevish, would allow no one other than mother or father to come near her. I was unable to give the case a careful examination. It improved for a time and appeared as if recovery would take place, but it seemed to take a fresh cold, and former symptoms became aggravated and evidences of effusion accompanied with paralysis of left side soon occurred. Finally it became comatose and died. I selected remedies as best I could, under the circumstances, being at first Bell., Cina., Merc. sol. After the brain trouble became so marked, and I could get a chance to study the case, I gave Bry., giving of course these remedies at various times.

CASE SEVENTH.—Belle, aet five months, infantile erysipelas. Began about the genitals, extended finally all over it, excepting its head, was first treated by a modern allopath, who says there is nothing in the law of similars, and yet claims to be independent, and that he gives specific or homœopathic remedies. After treating the case for a few days, he

gave an unfavorable prognosis, and declared he could do no more. My office being eleven miles away, I took the case under rather discouraging circumstances. The characteristic symptoms (the inflammation being of a pale red color, etc.), called for Bryonia, after a little Arsen. was given. Finally there became a partial loss of power on right side, with a drooping of the inferior maxillary. The case looked to me something calling for Lachesis, excepting not being on left side. I concluded to give Crotalus Hor.^{200}. It was followed by the most happy result, a fine recovery.

LXXIII.

Infantile Mortality.

By Casper Bruchhausen, M. D.

Infancy, the period of human life the most tender and helpless, is at the same time beset with most dangers and diseases, for it is not only liable to most affections of the adult, but has also a number of its own, more or less significant. As a consequence it is to be expected that the chances of life in this early age would be proportionally small. This supposition is borne out by the mortuary lists, where such have been kept, yea, in the larger cities overrun, while in smaller towns and even in rural districts, the mortality of babes is enough to excite remark and comment.

Now if in the country it should happen, that one or two-thirds of lambs, calves, or chickens perished in their first months, would it not create a panic? Would not the cry of an epizootic be raised and a committee started to investigate and devise measures to avert or remedy the thinning of herds and flocks? Such calamity, however, occurs rarely under common care of birds, cattle, sheep and horses.

In this respect where stands proud man compared with the so-called brute creation, biped or quadruped left to their own instincts!

Is it not time to enquire into the causes of this dire diminution of our young, particularly observable in the centres of our civilization and discover the means to counteract it so far as foresight can accomplish. Since this fatality is not a sudden visitation, as is related of the first born in Egypt, but an ever repeated occurrence only more or less aggravated in certain seasons and years, we must conclude that it is owing to some natural or rather unnatural causes, continuously in operation.

What then are these causes? I will point out a few of them, leaving it to some popular writer to treat the subject more exhaustively. In the first place, I will admit the influence of climate. Its rapid changes, exhibiting sometimes three kinds of weather in one day, are certainly calculated to effect the respiratory organs, producing in children catarrh, pneumonia, croup, etc. The elementary spirits are of course beyond our control, but we can do something to protect against their inclemencies by domicile ventilation, clothing, care of exposure, etc., on which I will here not further enlarge.

SECOND.—Constitution. In this respect parents must take a part of the blame. "Fortes creantur fortibus et bonis," (Strong are begot by strong and good—sound) is as true now as nineteen hundred years ago, when Horace enunciated it to the degenerating Romans, whose dominion a few centuries later was overthrown by the stalwart and healthy barbarians of the North.

It reminds also of the Scriptural threat of the Mosaic law, that the sins of the parents would be visited on their posterity. We have not a few habits which contribute to render the progeny so weakly and liable to fall victims to premature graves. Sexual abuse, tobacco and liquor, transmit to the offspring an irritable nervous system, with little stamina to withstand the attacks of disease.

But as corrupted seed will not produce healthy plants, so will poor soil not make vigorous growth. Certain fashions of dress, tight lacing, unseasonable hours, luxuriousness, over-exertion of body or mind, too much work without adequate recreation, transgression of hygienic laws in general, make of women, poor mothers, whatever their talents and intelligence may be. On the women, their still domestic virtues, depends the happiness of home, depends greatly, even the condition of the Republic. Let them instead of striving to outrival each other in dress, in aspiring to suffrage and office, take a pride like the mother of the Gracchi, when asked to show her jewels, calling and pointing to her two sons, afterwards illustrious for their patriotism. Think of Mary Washington and her conduct in raising a family.

THIRD.—Food. Chemistry has done much to invent articles easily to be assimilated by the infant stomach, but it will never replace mother's milk, or the least, the supply of a wet-nurse, the very aura of which is imparting vitality. The substitute so freely used in large cities, cannot be expected to work like the humanized fluid at the best, but its noteworthy doubtful character is the baleful source of diseases of the alimentary canal, which prevail in the summer months and carry off so many of the little innocents. Let our wives recur to the fountain provided by nature, when the mother for good reasons, (ill-health, scrofulous or other taint), cannot furnish wholesome nourishment, resort to a healthy wet-nurse, or where this is not procurable, as a last resort, administer animal milk of healthy cow, goat or sheep, with such restrictions or provisions as an experienced physician may recommend.

The foregoing are the main physicial deficiencies, which I will suggest as requiring correction. Our lady colleagues, more familiar with the nursery, will not fail to furnish details for the better management of our infantry.

LXXIV.

Gangrene of the Mouth and Vulva, with Cases.

By Edward Chapin, M. D.

"Gangrene of the mouth is an affection which usually occurs in children of debilitated constitutions. It is known by a variety of names, viz.: cancrum oris, noma, gangræna oris, kanker of the mouth, gangrenous stomatitis, etc. It is most common between the ages of three and six. Cases are on record of its occurring in infants and adults.

Unfavorable hygienic conditions constitute a strong predisposing cause. Children living in crowded institutions or homes, where their parents are poor, or in want, and where constitutions have been greatly deteriorated by long illness, by the tubercular diathesis, or by acute diseases, are particularly apt to be attacked. It almost always follows upon some previous disease, particularly measles, or some other acute exanthemata, pneumonia, entero-colitis, whooping cough, long continued malarious fevers.

"*Symptoms.* It generally begins during the course or convalescence of some of the above named diseases, by ulceration, or phlyctenæ of the mucous membrane. When the ulceration commences on the inside of the cheek, it is usually accompanied with considerable swelling, so that the cheek appears externally quite prominent, and *this* is sometimes the *first* work of the disease which attracts attention. The face is pale and usually continues so throughout the disease. The lips generally are swollen and covered with scabs, or are dry. The breath of the child is fetid from the beginning, and as the disease progresses becomes gangrenous. There is but little fever at first, unless the case be accompanied by some acute disease; the pulse is commonly frequent and small in the beginning. The child is generally languid and quiet at first. Generally there is but little complaint of pain made. The ulceration spoken of as forming the first symptoms of the disease is generally of a grayish color, and resembles very closely that which exists in the ulcero-membraneous form of stomatitis. It may be seated either on the gums, in the fold formed by the junction of the cheek, or lip with the gum, or on the inside of the cheek, opposite the space between the alveolar processes. It may present a gangrenous appearance from the first day, or not until two or three days after.

The ulcerations change from a grayish color to dark, bleed easily when touched and are covered with pultaceous sloughs, exhaling a characteristic fetid odor. The gangrene extends to the neighboring parts and implicates at last the whole side of the mouth, or of the lower lip. At the same time the affected cheek or lip undergoes a circumscribed infiltration which is at first soft, but becomes afterwards firmer, and forms at last a hard and rounded knot or tumor in the centre of the cheek, which is now tense, shining and pale, or marbled with purple spots, while the slough on the inside is of a brownish color, more extended in size, and sometimes surrounded by a dark ring. The hard tumor of the cheek, just described, usually appears between the first and third day after the sphacelation of the mucous membrane.

The child may now show signs of weakness and depression; the face is swollen and destitute of expression on the affected side; a bloody or dark colored saliva runs from the mouth, which is partially open. Diarrhœa is almost always present."—(Meig's.)

GANGRENE OF VULVA.

"Gangrene of the vulva is caused either by diphtheria, or comes on like noma in children who have first passed through a severe febrile disease, such as typhus fever, small pox, scarlatina, or measles. Sometimes it comes on so rapidly, and without any subjective symptoms, that the attention is first attracted to the gangrenous odor. This leads to a careful examination, when a few gangrenous vesicles, as a rule, are found upon the internal surfaces of the labia majora, which soon burst and give exit to a gangrenous ichor. In other instances, when mortification has invaded the deeper structures of the labia, the latter will become œdematous, assume a bluish color after the pains have existed for several days, and finally burst, when a large gangrenous surface will make its appearance. The mortification is mostly moist, spreads rapidly and ultimately terminates in death."—(Vogel.)

Prognosis, "Meig's." "Exceedingly unfavorable. The great majority of the subjects perish in spite of all that can be done."

"Vogel." "Prognosis very bad." "Out of five cases one only recovered, and that with a frightfully disfigured nose and cheek." According to compilation by "Tourdes," sixty-three out of two hundred and thirty-eight recovered.

TREATMENT OF GANGRENE OF THE MOUTH AND VULVA, BY OLD SCHOOL.

"Vogel," "says that in gangrene of the mouth Chlorate of Potassa may be given from twenty to sixty grains per day, according to age of child. Here, however, the effects of this remedy are not very brilliant. He advocates cauterizing the healthy parts contiguous to it. Concentrated Muriatic acid should be pencilled over two or three times per day. He also states that milk or coffee is about the only article of diet for which they have any relish, of which as much as possible should be administered to them."

"Roberts," "advocates use of strong Nitric or Hydro-Chloric acid externally. Anti-septic mouth washes should be freely used, such as one containing Condy's fluid, Chlorine or Carbolic acid, which may also be applied as dressings. Chlorate of Potassa used internally. Tonics and nutritious diet." Other authors advocate about the same.

Of gangrene of vulva "Vogel" says that "the treatment is very unsatisfactory. Internally he recommends a stimulating diet. Topically the parts should be pencilled with concentrated mineral acids, or a strong solution of Corrosive Sublimate."

HOMŒOPATHIC TREATMENT FOR NOMA.

Same as in cases reported and in addition the following:

"Hale," speaks of the successful use of "Baptisia tinct.," externally and internally, also "Hydrastis can. tinct."

"S. P. Hedges, U. S. Med. and Surgical Jour., Vol. VIII, p. 449, recommends internal use of Phos. ac. in cases following measles, and in syphilitic children."

British Jour. of Hom., Vol. XI., 1853, p. 147, reports several cases, treated successfully with Ars. The season had been exceedingly damp and probably was the exciting cause.

GANGRENE OF THE MOUTH FOLLOWING TYPHOID FEVER.

H. H., aet five years. He at this time was very weak and debilitated as he was just recovering from typhoid fever. The first thing that attracted my attention was that his right cheek was swollen and presented quite a prominent appearance. On a closer examination the cheek appeared quite tense, shiny and pale. Also noticed that the breath of the child was very offensive. By pinching the cheek with the fingers could feel quite a hard knot or tumor. On examining the inside of the mouth found the gums of right side in an unhealthy condition. Aphthæ in two or three places. The slough on the inside of the cheek was brownish. A darkish fluid came from it. The mouth was thoroughly swabbed with a strong solution of the Chlorate of Potassa, allowing the child to take internally some of the solution. The swabbing was thoroughly done every half hour until slough came away. After several hours a change for the better was manifest, and after three or four days healthy granulations appeared, and the child made a good recovery. There was quite a large cavity in the cheek after the slough came away. The child partook quite freely of milk and part of the time was stimulated with brandy, etc.

NOTE.—The temperature in this case was lowered, and at times was only 97°. Stimulants were then used quite freely.

(The Chlorate of Potassa is soluble in two and one-half parts of boiling water, and only one in sixteen at 60° F.)

GANGRENE OF THE MOUTH IN COMPLICATION WITH PNEUMONIA FOLLOWING MEASLES.

G. P., aet 2⅛ years. Her parents had moved from State of Maine to this city. The change was not beneficial to the child, as she began to fail shortly after their arrival here. About the middle of June, 1880, the child was taken with measles; the parents thinking that she was doing well did not employ a physician. When the eruption had nearly disappeared, they observed that the child had a high fever, associated with very rapid respiration. It was at this time that I first saw the child and found that she was suffering from pneumonia. About the fifth day of the pneumonia the child was much prostrated, very restless, pulse thready and rapid. Observed small ulcers on inside of lips, cheek, and on uvula—they did not appear gangrenous at this time. ℞ Ars. When I called again, however, suspected gangrene of the mouth; the patches felt quite hard externally, and about the size of bullets. Odor from them was very offensive. The gangrenous spots were frequently and thoroughly swabbed with a strong solution of Chlorate of Potassa. Also the solution was given internally. Small shreds of the slough came off during the operation. The child had diarrhœa, the stools were frequent, watery and very offensive. The child lingered two or three days and died from the pneumonia. The gangrene was checked, sloughs came away and the mouth left in quite a healthy condition.

REMARK.—The diet about the same as in other cases reported. In swabbing do it so thoroughly that the parts affected will bleed. For this

purpose the swab is better than a brush. This course of treatment has been successfully used for quite a number of years at the Children's Hospital connected with the Five Points Home of Industry, New York. It was at that institution that two of the cases here reported came under my observation. From Jan. 1861, to Jan. 1880, there were treated at that institution forty-one cases of gangrene of month, with three deaths, and those who died were complicated with phthisis. Of gangrene of vulva six cases with one death.

CASE OF GANGRENE OF VULVA, FOLLOWING PNEUMONIA.

L. K., aet five years. While recovering from quite a severe attack of pneumonia, the child appeared to have pain about the genitals. On examination found on the inner surface of the labia small ulcers. The nurse thoroughly cleansed the parts with a weak solution of Chlorate of Potassa, and gave Ars. internally. Let me here add that her temperature at this time was 99°. The condition of the child next day was not improved as the appearance of the lubia showed a gangrenous tendency. The parts were now thoroughly swabbed with a strong-solution of Chlorate of Potassa; also gave some of the solution internally; evening of same day temperature 100¾, pulse 116; labia quite œdematous and inflammed also hard under pressure; the child was taken with diarrhœa; she seemed very much exhausted. There was an ichorous discharge which was quite offensive. The swabbing was continued at short intervals for a day or so when the slough loosened from the edges. At this time the vulva was packed with triturated Camphor, and Chlorate of Potassa given internally. About the fourth day from the first appearance of gangrene the slough came away in one piece and measured in length one and one-half inches, in width three-fourths of an inch and over one-half of an inch in depth. The cavity was packed with the Camphor for several days after. The child recovered and is quite rugged at the present time. The diet consisted chiefly of milk, beef tea and occasionally a little brandy in the milk. Beside the slough spoken of there was a smaller one from posterior commissure and involving quite a portion of the other labia.

REMARK.—In adenitis, especially in neck and groin, in scrofulous subjects when unhealthy suppuration is taking place with gangrenous tendency, triturated Camphor packed in cavities has many times proved beneficial.

The following interesting case is reported by T. G. Comstock, M. D., of St. Louis, Mo., in N. A. J., of Hom., 1861, Vol. IX., p 425:

"*Noma.*—H. S., male child, aet sixteen months, admitted in hospital July 27, 1859. Child is still nursing; was born in Illinoistown, opposite St. Louis, in the "American Bottom." The disease made its appearance fourteen days before the child was admitted to the Hospital, and the first symptom the mother noticed was a fetid breath, and the falling out of the upper incisor teeth.

Status Præsens.—The upper lip presents a gangrenous phagedenic appearance; in fact it has nearly all sloughed away, and with it a portion of the septum-narium, as well as the alveolar process of the upper jaw beneath the lip. The stench arising from it was horrible, but the child, although weak and fretful, was at times lively and free from fever; the

pulse was, however, much accelerated and irregular. ℞ Ars. every two hours, and kept lint constantly applied wet in a solution of Hydro-Chloric acid and water. July 29th. The gangrene seems to have spread, and its ravages seem to extend upwards, so that at least one-third of the nose has sloughed away. I now applied to it a solution of the Chloride of Zinc (five grains to one ounce of water), instead of Hydro-Chloric acid, in the same manner as the last named preparation; the Ars. was continued. July 30th. The sloughing has increased; the child looks more and more frightful, and the Chloride of Zinc has not relieved the horrible smell; we now ordered it frequently washed with Charcoal water, and lint dipped in a solution of Chlorate of Potash to be constantly applied. The sloughing continued to spread, and the greater portion of the nose disappeared. In the meanwhile we gave the child from the first, beef tea and panada, with wine in it; after the loss of the incisor teeth the little thing refused to nurse. Aug. 1st. The lateral incisors and first molar teeth of the upper jaw have all fallen out, and the phagedena, which is approaching the upper portion of the nose, has produced a discoloration of the surrounding parts, which extends even to the internal canthi of the eyes.

The mother saw fit to remove her child back to Illinoistown, believing that "no doctor could cure it," (which was indeed true), and the little one died two days after. It will be seen that our treatment was here unsuccessful, although, in former years, we have treated one or two patients in a similar way with success. What is particularly interesting in this case is that the disease was caused by marsh-malaria."

LXXV.

Peculiarities of Infant Anatomy, Physiology and Digestion.

By H. L. Waldo, M. D.

While the necessities of nutrition require that the food of infants should contain at least one compound from each of the three classes of food, there are certain anatomical and physiological peculiarities of the infant that require this food to be presented in certain forms, in order that it may serve the purpose of a nutriment.

Suction seems to be a reflex movement, in the very young infant, excited by the presence of any small article held in the mouth, and nature has taught it no other way of conveying to the pharynx those substances which are its foods. If fluid is given in any other manner, than by suction, it will run out of the mouth, unless care is taken to carry it far enough back to excite reflex movements in the œsophagus. It was evidently nature's design that the young infant should obtain its food by suction, for which purpose the food must be in a fluid state.

All the movements of the infant are characterized by weakness, all the physiological processes are characterized by feebleness, and we are justified in concluding that the food should be very easy of digestion, in order

not to overtax the delicate organism. "The intestinal tube is much shorter in the infant than in the adult, and the large intestine approaches more nearly in its length to the small. The cæcum is very small, the peristaltic motion is rapid; all these are evidences that food taken will be kept for a shorter time in the canal, and, therefore, should be in the condition most favorable for digestion."[1]

When this simple apparatus is compared with the complicated digestive apparatus which exists in herbivora or with that of the adult man, it is evident that animal food is what is required by the infant organism.

The salivary glands do not secrete saliva till after the third month, and the pancreas does not commence its activity till a still later period;[2] and, when these organs do commence to secrete their respective fluids, it is at first in small quantity. It is thought that not till the beginning of dentition do they become sufficiently active to aid, to any extent, in the process of digestion,[3] and even then it is doubtful if they are prepared to perform that proportion of the digestive process that they perform in after years. Korowin, of St. Petersburg, has proved that, during the first two or three months of life, the salivary and pancreatic glands are in an undeveloped state, and cannot digest starch or emulsify fat.

This being the case, it is evident that no fats should be given to a child before dentition, except they are already in a state of emulsion, for only in this condition can they be absorbed or in any way assist nutrition.

It is also evident that no food containing starch is admissible before dentition, for starch must be converted into glucose before it can be absorbed and this transformation can be effected only by the juices of the salivary glands and pancreas. "It is absurd[3] to attempt to nourish children upon starchy food, not artificially digested before the period at which the saliva and pancreatic juice attain their functional activity. In the early months of life, probably till the beginning of dentition, infants offer a time physiological dyspepsia for starchy aliment, caused by the inactivity of one, at least, possibly of all the humors that concur in the digestion of these aliments."

Dr. Routh says that starch should not be given till the eighth month, and I should certainly not give it before that time and not then unless the development of the teeth indicated that the pancreas was developing also. This is one of the most important matters connected with the artificial feeding of infants, and one which cannot be disregarded without greatly endangering life. To introduce into the stomach a substance which can not be digested is to produce irritation and disease, especially if these substances are of a nature to ferment or decompose.

From a consideration of the facts just presented, it is evident that there are two periods, during the time that an infant is artificially fed, and that the nature of the food that may with safety be employed differs in each.

During the first period, which embraces about the first seven months of the child's life, no food containing starch in any form should be allowed,

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[1] Wert's Diseases of Children, London and New York, 1841 pp. 402, 403,

[2] See statement of Prof. Zweifel of Erlangen in Medical Record, November 3, 1877.

[3] See communication of Dr. Prospero Lousino, of Pisa, in the Practitioner for September and October, 1872. I have seen this quoted by some American author, but I have mislaid the reference.

and fat should only be given in a state of perfect emulsion, and all food should be in the liquid form. These conditions are all fulfilled in animal milks, and, when these do not agree, or cannot be procured perfectly fresh and pure, the food employed must be chemically and physically identical with them. Gradually, as the teeth develop, and, with them, the salivary glands and pancreas, starch may become an ingredient of the diet, and fat may be given without first being emulsified. When this condition of the digestive organs is developed, the child is in the second period mentioned above. But, up to the time it is a year old, a great part of its nourishment should be in the liquid form and free from starch and solid fats.

LXXVI.

Cotton.

By C. Tho. Liebold, M D.

There is, perhaps, no physician who has not prescribed cotton to be put in the ear of his patients, who were suffering from pain or discharge in this sensitive organ. Indeed most of the patients will do it or have it done before they call on the physician. To clean the ear of the purulent discharges by "absorbent cotton," is in most cases by far, preferable to the syringe, and can be done in cases of children, by the mothers generally, with advice and care very easily, and the children submit much more gracefully to the gentle touch of the soft cotton than to irritating liquid and hard syringe. Every ear patient should wear cotton in the ear as a protection; not rolled up like a hard ball, but a small quantity and as loose as possible. While nobody objects much to put cotton in the ear, the advice to put it in the nose meets with quite a different reception. "Why, the idea!" "Stuff my nose up?" "How can I breath then?" "People will think me crazy." Well try it once. There is no more soothing application for your chronic catarrh than a little soft cotton, and you can push it up so that people don't notice it at all. When you blow it out put fresh in, always have it with you rain or shine; and I insist on it in every case now, "No cotton, no treatment." In ophthalmic practice I have used the cotton for many years with the best success. Especially in the severest cases of tritis with excessive ciliary neuralgia and when the dry cold is not borne well at all. I have the whole head wrapped up in cotton, secured by an old fashioned woman's night cap, and by a loose bandage over the face. Some ten years ago I treated an old lady with ulcer on the cornea and tritis with pus in the anterior chamber. Though I had warned her to keep indoors, as it was in severe winter weather, she had to visit her benevolent institution, in which she took great interest; got thoroughly drenched in a storm of sleet and snow, and caught in addition a very severe attack of dysentery. Pain from tip to toe. She had had an attack many years ago which lasted from six to eight weeks,

under old school regular treatment, and brought her to death's door, with very slow recovery of strength, so she was perfectly sure this would finish her, and I felt just a little bit doubtful too. As she was suffering so much, was very obedient and allowed herself to be wrapped up in cotton from head to foot, only leaving the parts of entrance and exit free. Not to stir, and the discharges to be received on cotton, which could be removed easily and keep her clean. Not to press for any discharge however strong the inclination, but, on the contrary, to draw the sphincter ani back with all the moral and physical power she could command. Medicine, Baptisia. tinct. gtt II in alternation with Merc. corr. ($\frac{1}{100}$) gr. ij per dose, only to be given after an evacuation. Very soon she began to perspire, with that the pain subsided, and she made the most rapid recovery that I have ever witnessed from such grave diseases. Where the vital forces are seriously lowered, indicated by a cold, clammy, not relieving perspiration, we should husband the remaining strength; and I do not know any more simple and effective method than the soft, clean non-conducting cotton wrapper.

LXXVII.

Color Blindness.

BY F. PARK LEWIS, M. D.

The subject which I wish to briefly bring before your attention at this meeting, the loss or deficiency of the color sense, I do not wish to treat in a technical manner. For while it is in all of its details of most intense interest to the specialist, it is generally attractive only to the degree that its influence is felt on our daily life. I will not, therefore, in this paper, touch upon the theoretical questions bearing upon the subject, but in very few words will explain the nature of the defect, its prevalence, the danger which in certain classes of society may result from the condition when it is unrecognized, and the necessity of State legislative action as a protective measure.

It is to Dr. Holmgren, of Upsale, Sweeden, that we are indebted for the impetus that has been given to the study of color blindness throughout the world, but it is Dr. B. Jay Jeffries, who, by his indefatigable labors has succeeded in awakening a general interest in this very important subject. The manual which he has written on color blindness and which is considered an authority in official examinations under the government, contains a full and clear explanation of the subject as it is understood to-day with most explicit directions as to the manner of carrying out the tests. To those interested in a more careful examination of the defect, this book is recommended.

In a large majority of cases color blindness is a congenital defect. It is of little practical interest whether it be true that each fibre of the retina is capable of transmitting sensations corresponding to all of the

primary colors, or if the proper theory is that which Young proposed and Helmholtz endorsed, that there are three kinds of nerve elements for the three principle colors, and that the intermediate portions of the spectrum arise from the combined action of these. Suffice it to say that in certain individuals, for some reason, the sense of chromatic perception is almost or entirely absent. Complete color blindness is of rare occurrence. Usually but one of the primary colors is lost, less frequently two cannot be recognized and in rare cases it is possible only to distinguished between white and black, or rather all colors have resolved themselves into simple light or dark shades. An instrument very commonly employed by the oculist as an aid to his diagnosis is the perimeter. The eye being fixed upon a given point, a bright object is moved in all directions outside of the visual line. The perceptive power of the entire retina can in this way be discovered. By substituting colored discs we learn the interesting fact that all colors are not recognized by the retina over an equal extent. The narrowest limit is for the red, next green and finally violet. It is also true that the larger number of color blind people fail to recognize red while all other colors are perceived. By a smaller number red and green are indistinguishable, and in a few instances violet is also lost.

As astigmatic people sometimes go through life without being conscious of their defect, imagining that all things have the same distorted appearance to other eyes that they have to their own, so the color blind may be totally ignorant of their defect. Indeed, it is those only who have keen observation who are ever able to thoroughly recognize the extent of their deficiency. Their errors pass for negligence. Knowing from education that the fruit of the cherry tree is red while the leaves are green, they imagine that the color that it appears to them is the same as that seen by other eyes. They learn to depend largely also on the intensity of light, so that while their differentiation of the various colors is by no means reliable, they may be still able to avoid gross errors sufficiently to mask their defect from even a close observer.

Since large numbers of examinations have been made in this country and in Europe, color blindness has been found far more common than was supposed. In 1084, railroad employés examined by Dr. Fontenay, of Copenhagen, twenty-eight per cent. were found to be color blind. Dr. Donders, of Urrecht, found six per cent. of those he examined to have defective color sense. Dr. Krone five per cent., Dr. Stilling six per cent., Dr. Jeffries over four per cent. Of the railroad employés tested in this country about one in every twenty-five has been found unable to distinguish colors.

The publication of these facts has not been without its effects. The government has recognized the necessity of having those only in its service whose eyesight is perfect, and students entering either the military or naval academy are tested, not only to determine the acuity of vision, but also for the color perception. General orders have been issued by the Secretary of War, making these examinations very thorough and complete. By order of the Secretary of the Treasury pilots in the merchant marine service receive their licenses only after having demonstrated their ability to distinguish colors in an examination conducted by a surgeon of the marine hospital service. These examinations are made free of expense

to those applying for license. It will thus be seen that the departments of the Treasury of the Army and of the Navy have each acted in this matter, but have not established any standard requirements by which the examining medical officer may be governed in his decisions. With a view to regulating this, the following bill was introduced at the last session of Congress:

"*To the Honorable the Senate and the House of Representatives in Congress assembled:*

WHEREAS, A normal acuteness of vision and good color perception are needed in officers and crews for the safe navigation of vessels, and whereas most maritime nations now require a certain standard for these qualities by absolute test, the undersigned would most respectfully petition your honorable body to take into consideration a general law of control in the navy and merchant marine, of color blindness and visual acuteness, and the agreement by an international commission of definite and uniform standards of testing these necessary qualifications." This petition was signed by many leading scientists and oculists.

The naval committee to which this was referred gave the matter their careful consideration. Their report embodied many of the facts obtained from the existing literature on the subject, and recommended the adoption of the accompanying joint resolution with the view of making some progress toward the desired end:

"WHEREAS, It is important that definite and uniform standards of examination for color blindness and tests for visual acuteness in persons employed in the navy and the merchant marine should be established which shall be in harmony with such standards and tests established or to be established by other nations, therefore

Resolved, By the Senate and House of Representatives of the United States of America in Congress assembled, that the Secretary of State is hereby authorized to designate such officer or officers in the diplomatic or consular service of the United States, and the Secretary of the Navy is hereby authorized to detail such officer or officers of the Navy of the United States as may be deemed qualified for such service, to attend and represent the United States in any international Congress held to consider and act on said subject. And such officers so designated and detailed, shall join in a report of the proceedings of such Congress and of the conclusions reached thereby, if any, to the President of the United States, to be by him laid before Congress, to the end that an international system of examinations and tests as aforesaid may be established by law."

At the next session of Congress this subject will be considered.

An equal if not a greater danger to that arising from color blind pilots arises from the same cause in railway employés. Says Dr. Jeffries in his manual before referred to, "the government can and no doubt will carry out proper examinations for color blindness in the army and navy. General national laws can also be enacted as to the merchant marine. International action will come as a matter of necessity. The difficulties with the railways are however very great. Here the interest and safety of the community have to contend with ignorance, predjudice, pecuniary considerations and incredulity born of supposed immunity from danger."

Although this whole question has received considerable attention from scientists and much has been said concerning it in the daily press, comparatively little has really been accomplished. Dr. Jeffries has been instrumental in introducing in the Massachusetts Legislature the following order: "That the committee on railroads inquire whether any and (if any) what legislation is necessary in reference to the employment by railroad companies in certain responsible positions of persons not having normal or the average visual power."

This order was passed and Dr. Jeffries appeared before the committee and offered a lengthy argument in favor of the views which he had advocated in his manual. I am indebted to him for a copy of his argument, with the general measures proposed. I regret that the limits of this paper will not allow even a brief synopsis of this matter. Suffice it to say that in every respect the examinations should be very thorough and carried out by experts. But a single state has made such examinations compulsory. A bill was introduced and approved on the 25th of March last, requiring that "On or before the first day of October, 1880, every railroad company and trustee operating any railroad in this state shall cause every person in their employ, as locomotive engineer, or fireman, train conductor or brakeman, station agent, switchman, flagman, gate tender or signalman, to be examined at the expense of the railroad company, by one of the examiners appointed by the Governor in regard to color blindness and visual power, and shall cause a like examination to be made of all persons employed after said date, in either of the capacities named above, and shall cause re-examinations to be made in accordance with the rules prescribed by the board of health." The employment of an individual whose freedom from visual defect is not shown by a properly endorsed certificate, or whose certificate has been revoked is punishable by a heavy fine. The necessity of accurate scientific examinations in every case is not generally appreciated. Several marked cases of defective color perception having occurred in an examination of pilots at Baltimore, the Philadelphia *Ledger* comments upon them, venturing the opinion that the usual working conditions would prove far more available and trustworthy than the wools usually employed. Space will not allow me to demonstrate the fallacy of this reasoning, which, if adopted, would invalidate the test completely. Suffice it to say that to protect the travelling public the examinations must be made with all the rigidity that Dr. Jeffries demands.

That ultimately examinations, which to-day are optional with the railroad companies, will eventually, by legislative action, be compulsory throughout the country, is scarce a matter of doubt. Under any individual arrangement an employé discharged because of visual defect can seek and obtain a position with some other company. To obviate this the control must be exercised through one body and in a systematic manner, and that this may the more speedily obtain, I would suggest the advisability of this society assuming the initiative, and through a committee appointed for that purpose to urge the investigation of the question, what, if any, legislative action is necessary relative to the subject in order that the public interest may be properly protected?

LXXVIII.

Progressive Myopia.

BY F. PARK LEWIS, M. D.

Attention has so frequently of late been directed to questions pertaining to ophthalic hygiene, that aught additional may seem a work of supererogation, and yet the alarming frequency with which cases present themselves to the oculist in which irredeemable injury has been already accomplished by reason of habitual neglect of the simplest precautions, urges the necessity of a more general knowledge of the dangers to which vision is subject and the manner in which these dangers may be avoided. It is a wide-spread error that a near-sighted eye is *par excellence* a strong eye; that because of the readiness with which minute objects are discerned and the endurance often shown in continued work, the eye is therefore less susceptible to the disease than an optically perfect globe. This fallacy is the more generally accepted by reason of the fact that the myope may dispense with convex or old sighted glasses, until a comparatively late period of life, if indeed, they are ever necessary, a fact which is wholly physiological and readily explained on optical principles. The myopic eye, on the contrary, is or has been in a state of inflammation; and no condition demands greater care than this. Without entering at all into the pathological processes involved; suffice it to say that in many instances a positive sclero choroiditis obtains. This condition, often passive and long continued, weakens the resistance of the firm, coat by which the shape of the globe is maintained until in time the normal intra-ocular pressure is sufficient to lengthen the antero-posterior diameter, and eventually a posterior sclevectasia results. This condition having once obtained, is rarely, if ever, cured, while the tendency is with increasing years, to constantly progress until eventually the most disastrous consequences may ensue. The inner coats of the eye, deficient in the elastic elements found in the sclera, cannot, with it, stretch under pressure. The choroid chemically inflamed gradually atrophies around the optic nerve disc and in the worst cases the retina is torn loose from its attachments. The frequency with which the very severe cases occur, coupled with the fact that while the results of the disease may not be removed, its course may be stayed, urge the necessity of its early recognition and the use of such treatment and council as will stay the progress. When it is found necessary to bring newspaper print closer to the eye than fourteen inches, in order easily to read it, it may be assumed that some refractive error or visual imperfection already exists, and a careful examination should be instituted. Conditions may thus be anticipated which unheeded might result seriously. The fact that concave lenses may be overcome by the exercise of increased accommodation, renders it always hazardous for a myope to select his own glasses. Too frequently those of short focus are chosen, while those of weaker power would prove all-sufficient, and the disease is thereby increased. The following is a case in point: A youth of eighteen who is a printer, says he has been near sighted for several years. For some months has worn glasses, which on

testing I find to be number 12, concave. Finds that since using the glasses that the eyes have been painful, and without them vision has been more defective. Has also burning and itching in the lids, the mucous membrane of which is congested. Ophthalmoscopic examination demonstrates retinal hyperæmia with slight lengthening of the globe and thinning of the choroid around the inner border of the disc. Visual test shows a myopia of $\frac{1}{14}$ in the right eye, $\frac{1}{11}$ in the left, reads easily at a suitable distance without glasses. He has therefore been using lenses much too strong and too persistently. Advised to use the eyes but little by gaslight until the irritation has subsided, always to maintain an erect posture while reading and to cease immediately when the eyes grow fatigued. As he finds difficulty in choosing his types from his case he is allowed to use number 20 while at work, and cautioned against bringing the printed page close to the eyes while reading. He is advised that under any circumstances the myopia will probably increase somewhat, but the weaker glasses which fully answer his purpose will retard the process.

The deficiencies of school architecture I have already dwelt upon elsewhere, and will merely refer to these as potent agents in developing and increasing the disease. I can but endorse the suggestion offered by Dr. Loring touching on this subject. He urges that school Boards should have upon them a competent oculist with whom the builder might confer before completing his plan, so that while æsthetic ideas might be successfully carried out, the provisions tending to the preservation of the sight might also be secured. The glaring defects so manifest in our public school buildings in this particular as well as the great increase in the number of myopes, demand some reform in this direction. The plan, too, of testing the eyes of the school children from time to time is useful, not alone for statistical purposes. A defective eye having in this way been discovered, advantages of position and council relating to the time and methods of study may be given to the child which will greatly mitigate and delay, if not wholly suspend the destructive processes of the disease. The simple fact that many of our school children have defective vision would not in itself be a matter of such vital importance were it not for the serious conditions to which it may lead. During the past year, at least half a dozen cases of progressive myopia have come under my notice, in which the disease had reached such a point that ultimate blindness must be prognosticated. The following cases are illustrative:

Miss Ella C, who is now twenty years of age, has always been near sighted, lately more so. Is obliged to hold ordinary printed matter within four inches of the eye in order to read it, when but one eye is used. Glasses afford little benefit. Ophthalmoscopic examination discloses extensive staphaloma posticum with alueptic patches encroaching on the macula. As convergence is relieved by the monocular vision, no glasses are allowed, but most careful directions given regarding the employment of vision. The condition is such that vision may last for some years but she will ultimately be blind. Again, a lady of sixty comes from a neighboring village. Has used the eyes excessively for some years past. Latterly vision has decidedly failed. Has been wearing concave glasses of ten inch focus, which fatigue the eye. Range of accommodations fair for

one so advanced in years. Myopia $\frac{1}{14}$ is discovered in each eye, but still vision is very defective. Large atrophic patches are discovered in fundus. As glasses of $\frac{1}{16}$ answer the purpose fully as well, these are ordered. The eyes must not be used for the present at all for close work, and always hereafter with great care. As the lady is quite delicate, vision may be retained during her life time although it will continue to decrease. Further, Mrs. W, aged 50, complains of great photophobia and pain in the eyes. A myopia of $\frac{1}{2}$ is found with considerable amulyopia. Great destruction of the fundus. The pain is controlled by remedies and the constant galvanic current. Glasses of $\frac{1}{3}$ can be used with almost as much benefit and these are advised. Weaker glasses are useless. Patient of an exceedingly nervous temperament, and of course no prognoses is given. These are certainly extreme cases but they indicate the condition at which a myopic eye may arrive. All were probably congenital, but all were doubtless greatly increased by ignorance of the proper care which such eyes demand. The object of this paper is to urge the recognition of this condition. Every myope should be conscious of his defect and should exercise through life the greatest circumspection in regard to his vision. He should, if necessary, have carefully fitted to his eyes, suitable glasses, and should never submit his eyes to unusual fatigue. If this be done the progressive nature of the disease may be wholly controlled and the sad consequences that might follow unlimited visual application be avoided.

LXXIX.

Therapeutics of Trachoma.

BY F. PARK LEWIS, M. D.

If the practice of the homœopathist is in any respect more successful than that of the old school practitioner in the treatment of ophthalmic disease the superiority lies wholly in the domain of therapeutics. By the careful use of the rightly chosen drug the necessity of surgical measures is often obviated, and even diseases which have been relegated to the incurable have responded favorably when met by the proper similimums.

That condition of the eyelid, whether due to hypertrophied papillæ, or to neoplastic formations which we term trachoma is at once one of the commonest and one of the most obstinate of the affections to which the eye is subject. The rough surface rasping over the transparent cornea soon causes the latter to become irritated and inflamed. The epithelium is denuded and its clearness is obscured. Soon minute vessels begin to shoot out from the scleral border. These increase in size and inosculate until the cornea, which has grown more and more turbid, is covered with a pannoused surface and vision is practically destroyed.

Without considering at present the etiological or pathological questions involved, I wish briefly to speak of the therapeutic resourses that have proved most successful in my hands in its treatment.

The cupric sulph., the mitigated stick, the silver nitrate, and even the actual cautery of allopathy has so often failed in relieving the condition, that we gladly welcome any method of treatment whereby we may effect a cure. The results obtained by homœopathy, while by no means uniformly gratifying, are yet sufficiently encouraging to urge more thorough investigation as to the action of remedies upon these abnormal formations.

The careful study of a large number of cases has suggested to me the following points which may or may not have been verified in the practice of others:

FIRST—As in the case of chronic disease the treatment is apt to be prolonged, we can in but few instances get the immediate relief that follows a cauterization, but the results obtained are much more likely to be permanent. Occasionally, as in the first case below, the cure may be a brilliant one, but this is the exception rather than the rule.

SECOND—The most prompt and gratifying results obtained from internal medication occur in those cases in which the symptoms of irritation are most marked. In those indolent cases characterized by drooping lid, dull pannoused cornea with little pain or photophobia, the remedies employed have given little satisfaction. Local stimulants or astringents have here oft times served a better purpose.

THIRD—The class of remedies from which the greatest benefit has been obtained has been in almost every instance our old constitutional polychrests, various other remedies may be required intercurrently but are seldom alone sufficient to effect a cure. The thirtieth and two hundredth potencies have been employed in the continued treatment with best results. Remedies used intercurrently have been frequently lower.

The following cases are illustrative of these points:

CASE FIRST.—Willie H, aet 13, German, light hair, pale, unhealthy skin, large amount of soft flabby fat, anæmic and debilitated. Has suffered for more than a year with granulated eyelids, and for some months past has been in hospital that they might be treated. Local applications employed have been blue stone and other caustics. Has had no treatment since leaving hospital some weeks since. Eyes not improved by treatment. Status præsens: Lids œdematous and drooping; palpebral conjunctiva rough, with granulations; almost constant secretion of thick mucus keeping cheek moist; photophobia so intense that vision could not be tested; cornea pannoused; digestion poor; loss of appetite; cold, damp feet.

Prescribed four doses of Calc. Carb. to be taken on successive nights. The first 30th, second 200th, third 2000th, fourth 6000th potency. To call again in a week.

Patient did not present himself for a month, as he constantly grew better. Had taken no other medicine than that which I had given him. Photophobia entirely gone. Still a slight secretion at times. The inner surface of the lids much smoother, cornea clear, vision good, general condition much improved. I made no accurate test of his vision, expecting to see him again, but soon after, feeling so much better, he left the city.

The unusually good result obtained in this case was undoubtedly due to the perfect harmony existing between the patient and the drug. The rather peculiar method of raising the potency with each dose, I have sometimes found in chronic cases to be quite satisfactory.

CASE SECOND.—Mrs. B, aet 26, dark, sallow skin, nervous temperament. Eyes so sensitive to the light that she was unable to leave her darkened room. For two years had been treated with blue stone and occasionally insufflation of Calomel dust, palpebral conjunctiva trachomatous, bulbar conjunctiva hyperæmic, cornea vascular, lachrymation profuse, pain in eyes so intense that but little sleep can be obtained at night, vision barely sufficient to enable her to find her way about the room, general debility, coated tongue, no appetite. ℞ Sulph. ^{200} and Rhus. tox. ^{30} alternately every two hours. Same remedies to be continued a week. At the end of that time the irritation had sufficiently decreased to allow her to be led heavily veiled to my office. Without entering into tedious details, suffice it to say that treatment was continued for three weeks, chief reliance being placed on Sulphur, although occasional intercurrent remedies were required, and most frequently *Nux. Vom.* in low attenuation for digestive disturbances. At the expiration of that time dread of light vanished. Vascurality had disappeared from corneæ, though some inequalities and opacities remained. An old traumatic cataract was now found to exist in the left eye; however vision had been raised to $\frac{8}{200}$ in., while an ordinary newspaper could be read with tolerable readiness, a feat not before accomplished for two years. All the improvement that could be expected had been completed and the patient was discharged.

Cases of this kind might be multiplied, but these are illustrative of the class. The remedies most frequently required have been Calc. Carb. and Sulph. Arsenicum has also been valuable, and benefit may often be also derived from Silicea. Our prescription must depend as much on the constitutional condition of the patient as upon the state of the eyes and lids. As I have said many times, cases occur upon which remedies seem to have little or no influence, and upon these preparations of Tannic acid and Glycerine, Aluminate of Copper or Alumen Exsiccatum may render good service, but the success which has so far attended our efforts in line of internal medication ought to be sufficient to warrant a most careful investigation of this more rational method of treatment.

LXXX.

Hints for General Practitioners on the Treatment of Injuries of the Eye.

By W. P. FOWLER, M. D.

Nature has thrown around the eye the bony, projecting walls of the orbit, has provided it with lids, cilia, and muscles; still, owing to its exceptional vulnerability and intolerance of the least irritation, no external organ of the body so frequently suffers injury. A grain of sand, though unnoticed elsewhere, would, in the eye produce serious discomfort. A particle of steel striking against the integument scarcely excites attention,

but if it penetrated the ocular tunics, sight, not only in one eye, but in both, might be lost. Cuts and bruises that would be considered of no importance in other portions of the body, might destroy vision if the eye were the seat of the wound.

In treating injuries of this organ, which is at once so delicate and important, a great deal of care, precision, and skill are often required.

I purpose to consider in this paper:

First—Injuries of the eyelids.

Second—Injuries of the conjunctiva.

Third—Injuries of the cornea.

Of penetrating wounds of the cornea, and injuries affecting the sclerotic, iris, and lens, as well as all deeper tissues of the eye, I shall not speak.

INJURIES OF THE EYELIDS.

Ecchymosis of the lids and surrounding parts is of frequent occurrence, and constitutes what is commonly known as a "black eye." A *slight* blow will often produce it, because the bones of the orbit are very superficial, and the integument over them readily bruised. Then again, the subcutaneous areolar tissue of the lids and orbit is extremely lax and delicate, and easily infiltrated with blood.

The remedies most efficacious in promoting absorption in these cases are:

Arnica, when the skin is not broken. It should be used both locally and internally. Locally, one part of the tincture to six or eight of water. A piece of soft linen should be saturated and placed upon the lids. Then fill the oribital hollow with either finely picked charpie or absorbent cotton, wet also with the Arnica. Over this place a flannel roller bandage, one and one-half inches wide, applied by alternating turns, first around the forehead, and then down under the occiput and over the eye, and fastened by pins. This should be drawn tight enough to exert some pressure, which is of great assistance in hastening a cure.

Calendula.—Of use when the lids or surrounding tissues are lacerated, and suppuration threatens. Should be used in much the same way as the above.

Hamamelis.—Useful in all cases, except when suppuration is present. Especially valuable in removing the greenish and yellowish stains that remain after the blood has been largely absorbed.

Hepar. Sulph.—After extensive extravasations when suppuration seems imminent.

When that serious complication, erysipelatous inflammation occurs, Apis., Ars., Bell., Lach., Rhus. tox., Verat vir., and other remedies must be borne in mind.

The use of leeches in ecchymosis is not advisable. They are not only useless, being unable to extract coagulated blood, but positively do harm by adding to the local injury.

The practice of making punctures and incisions for the purpose of allowing coagula to escape, should also be condemned. Such efforts to move the blood are of no avail, and are liable to be followed by suppuration and erysipelatous inflammation. The knife should only be used when the presence of pus or sloughing demands it.

Incised and lacerated wounds of the lids are often of a serious nature. Especially is this true if the tarsal margin is divided, or the whole thick-

ness of the lid, together with the ocular conjunctiva, is severed. Again, if the levator palpebræ be cut through, ptosis will follow. Wounds involving the canaliculi are also serious.

In treating these cases, the first thing in order is to remove all extraneous substances that may be present, such as sand, dirt, hair, etc. This it best done by syringing and with a wet sponge.

The wounded surfaces should be accurately brought together, so that there may be no deformity, and that union may take place by the first intention. Sutures are almost always required. Adhesive plaster will occasionally answer if the wound is very slight. Wire sutures ought not, in my opinion, to be used. Fine silk is much better. It is more readily introduced, adapts itself to the shape of the tissues more accurately, and is easily removed. To prevent scarring, the sutures ought to be withdrawn before suppuration commences. After they are taken out, adhesive strips can be applied, if necessary, to keep the parts together. When the tarsus is severed, sutures will not always hold the wounded surfaces in position, and pins, with the ligature must be resorted to.

If the free margin of the lid be divided, the greatest care must be exercised in bringing the edges of the wound together, so that no deformity shall follow, and that union may take place by the first intintion. The sutures should be so applied that the *margin of the lid especially*, may be *accurately united.*

As to dressing, cold water is, I think, usually best. Fold a piece of soft linen three or four times, dip it in cold water, lay it on the part, and keep it in place with a light bandage. Calendula, one part to six of water, should be used when there is suppuration. Acon. internally. Arnica, if the tissues be contused.

Punctured wounds should be treated much the same as the above. Great care is necessary, however, in making sure that no foreign substance is left in the wound.

Burns and scalds of the eyelids are often followed by sad results. Our aim in these cases should be to limit suppuration as much as possible, and thus lessen the extent of the cicatrix and contraction of the tissues. Care should also be taken to keep the integument on the stretch when cicatrization commences, and to prevent the margin of the upper and lower lids from uniting. I have found nothing equal to Calendula Cerate (Calendula and Cosmoline) as an application in these injuries. I apply it freely with a camel's hair brush to the burnt surfaces, and then cover the lids lightly with absorbent cotton, and hold it in place with a moderately loose bandage. When the healing process commences the integument should be kept on the stretch by the use of adhesive plaster if contraction threatens. To prevent union of the lids, smear the edges with Cosmoline, and have the patient endeavor to open his eyes widely at least twice a day. If these means fail, the adhesions should be broken up with a probe and oil silk, or tin foil inserted, so as to prevent further trouble. The silk is preferable in most cases, being less irritating than the foil. The angles of the lids especially will require constant attention until recovery takes place. Acon., Canth., Caust., and other remedies internally as indicated.

INJURIES OF THE CONJUNCTIVA.

Sub-conjunctival ecchymosis may be caused by a slight blow, by coughing,

by sneezing, or by retching. In one case that came under my notice, it was produced by straining while at stool. Many times the origin cannot be ascertained. No anxiety need be felt from it, as evil results do not follow uncomplicated cases. From conjunctivitis it is easily distinguished by absence of pain, of distended vessels, and of all inflammatory symptoms. The uniform deep red discoloration which abruptly terminates at the margin of the cornea, is alone sufficient to tell us the nature of the difficulty. Although patients do not suffer pain from this condition they are generally desirous of having it removed as speedily as possible on account of its unsightly appearance.

The principal remedy is Arnica, both locally and internally. A compress bandage, firmly applied, will assist greatly in hastening absorption. Other remedies are Ham., Ledum., and Nux. vom.

Wounds of the conjunctiva are not usually serious so long as this tissue alone is involved. It is only when the injury is very extensive, or when both the ocular and palpebral portions are cut or lacerated that any apprehension need be felt. At such times symblepharon is to be guarded against. In all cases where the wound gapes, sutures should be applied. A small, curved needle, and fine silk ought to be used. The sutures will come away of themselves in three or four days if inserted, as is best, close to the margin of the wound. Simple cold water dressing is preferable to any other. Keep the eye closed, and recovery will take place with astonishing rapidity in most cases. Aconite is the remedy internally.

Burns and scalds of the conjunctiva are often deplorable in their results, being followed by contraction of the tissues, and adhesions between the eye lids and eye ball. Fortunately the eye is frequently protected from these injuries by the involuntary closing of the lids.

The treatment is quite simple. We should first make sure that no foreign substance is present. Then drop a little castor oil into the eye and keep it closed. If adhesions form they should be broken up with a probe every day, or even twice a day if necessary. In grave cases it is often impossible to prevent the ocular and palpebral surfaces from uniting, and all that can be done is to hasten the healing process as much as possible, and afterwards resort to an operation for the relief of symblepharon.

For burns produced by molten lead, iron and other metals, the treatment is the same. Strange as it may seem, burns from this cause are usually slight. The moisture of the eye is quickly changed to vapor, which acts as a protection by forming a stratum between the tissues and the heated metal. I have on record several cases of this kind. In one of them, molten lead had struck the eye. The lids were blistered, the eyebrows and lashes were burned off, and the lead moulded in a thin layer to the shape ef the eye ball between the lids. On removing this scale I found that the conjunctiva and cornea were only slightly burned. In a week the man was well. Sight was unimpaired and there were no adhesions.

In all serious cases of burns and scalds, rest and quiet should be enjoined. Constitutional symptoms must be taken into account when selecting the remedy, which will usually be either Acon., Canth., Caust. or Ham.

Chemical injuries of the conjunctiva.—Lime, either unslacked, slacked,

or in mortar, is frequently productive of very serious trouble. The conjunctiva is often injured to such an extent that sloughing takes place, while the cornea is so badly burned that opacity and blindness follow. The secondary effects upon the conjuntiva are adhesions binding the lids to the eye ball or to each other.

As soon after the accident as possible, the lids should be separated, and the eye syringed with milk. By this means all loose particles of lime that may be present are removed, and the remainder to a certain extent neutralized, as the fatty portion of the milk unites with the lime and forms an innocuous compound. Water should never be used. Acids are also objectionable, being very irritating to the raw surfaces. After syringing with milk, olive or castor oil should be dropped into the eye, the lids everted, and all adherent bits of lime removed. Other treatment is the same as for ordinary burns and scalds.

When strong acids enter the eye an alkaline solution should be employed. Bicarbonate of Soda, or Bicarbonate of Potash, five grains to the ounce of water will answer. If neither be at hand, strong soapsuds will give some relief. But these neutralising agents should be used only a few times, else they become a source of irritation. After treatment, with oil, etc., is very similar to that for burns.

Nitrate of Silver is best neutralized with salt and water.

When foreign bodies, lying loosely on the conjunctiva are not gotten rid of by moving the lids, rubbing the eye, and by the profuse lacrymation which their presence excites, they will, in the great majority of instances, be found on the inner surface of the upper lid. To remove the irritating substance, evert the lid and touch the cinder, or whatever it may be, with the corner of a linen handkerchief twisted to a point. The particle will readily adhere to the cloth, which cannot injure the eye, even though carelessly used.

When chips of steel, copper, glass, and other substances become lodged in, and are adherent to the ocular conjunctiva, they are most easily removed by seizing them, together with the tissues in which they are imbedded, with a delicate pair of forceps; then, drawing them slightly away from the eye ball, snip off the conjunctiva which contains them with a pair of scissors. Not more than two or three days are required for the slight wound thus produced, to heal.

INJURIES OF THE CORNEA.

The cornea is the window through which we look upon the world around us. If it becomes clouded, sight is impaired; if it becomes opaque throughout its whole extent, we are incurably, hopelessly blind. It may be that the ophthalmic surgery of the future will give us light through this darkness, but to-day we have no remedy. Bearing this in mind, it will be readily seen how important it is to preserve the transparency of this portion of the eye.

In the treatment of injuries of the cornea, much care, judgment and skill are required, for in addition to opacity, we must guard against iridochoroiditis and sympathetic ophthalmia. The latter is especially to be feared if the wound occur at the sclero-corneal junction.

Abrasion of the corneal surface is an accident from which recovery often takes place in a few hours without any treatment. But sometimes,

when the system is in a low state from any cause, or when the article that inflicted the wound left a poisonous or irritating substance behind, the little abrasion will obstinately refuse to heal and lead to ulceration and perhaps abscess of the cornea. Again, if the instrument were blunt, and the tissues around the abrasion bruised, keratitis is apt to supervene.

To detect these injuries, place the patient in a good light before a window, and scan the surface of the cornea. If there is circumscribed loss of epithelium, the defect will be seen as a rough spot on the polished surface. Then, turning the eye in a different direction, it will be noticed that the denuded spot is transparent, and that no foreign substance is present. Other symptoms are pain, photophobia, lachrymation, and a sensation of something in the eye.

Very little treatment is necessary in most cases. Cold water dressing should be used, and a bandage applied to keep the lids closed. It is well to bear in mind that we have a "raw surface" to deal with, and that therefore the lids should be kept perfectly still. Aconite should be given internally unless contra-indicated. Arnica when there is contusion.

When the system is in a depraved state, and the wound does not heal, Ars., China., Nux. vom., Sul. and other remedies must be thought of. Should ulceration or abscess of the cornea follow, or sympathetic ophthalmia threaten, the case must be treated as usual when these conditions exist.

Wounds involving the true corneal tissue, and not extending through to the anterior chamber, do not differ from the above except in severity. The treatment is the same as given for abrasion.

Foreign bodies in the cornea.—When a dense substance becomes lodged in, or is adherent to the cornea, it should, as a rule, be taken away. In some instances, hardly any irritation occurs until several days have elapsed, but sooner or later bad consequences follow. If the body is left undisturbed, nature endeavors to cast it off as best she can. The corneal tissue around the foreign substance becomes infiltrated with inflammatory products, sloughing takes place, and an ulcer is left which may or may not heal readily. Opacity follows in all cases where there is loss of true corneal tissue. If the body be not thrown out in this way, abscess of the cornea, or suppuration of the globe may ensue.

As a general thing there is not much difficulty in detecting the position of the foreign body unless it is very small, and situated over the pupil. Particles of glass are difficult of detection, and can often be seen only by the aid of oblique illumination.

When the substance is simply adherent to the cornea, it is best removed as follows: Take a piece of common tissue paper, or of any paper that is thin, twist it to a point, and with it touch the little body. It will usually adhere to the paper and be easily taken away. If the particle be imbedded, a gouge, or spud, made especially for the purpose is required. Great care must be taken that the foreign body is not pushed back through the cornea into the anterior chamber, Such a complication would indeed be serious.

After the substance is extracted, very little or no treatment is required. If, however, there is much ciliary irritation, and the eye is injected, give Acon. and advise the patient to apply cold water.

Injuries from gunpowder.—In these cases the eye suffers not only from the presence of grains of powder, but is burned as well. If the accident be a severe one, it will be a fruitless task to undertake the removal of all the powder that is imbedded in the cornea. When possible, however, those grains that are over the pupil should be taken out, as they are almost always sure to permanently impair vision if left to be cast off. If the deposits are in the true corneal tisue, it is very difficult to extract them. The charcoal residue of the powder stains the tissues, so that it is only by excising a portion of the latter that the black speck can be wholly removed.

A piece of paper twisted to a point, as before described, is best to remove all grains that are simply adherent. For excising those that are imbedded, the gouge is necessary. Oil should be dropped into the eye three or four times a day, after everything possible towards removing the powder has been done, and a bandage applied. Aconite should be administered for a day or two at least, and then, if as frequently happens, pus sinks to the lower portion of the anterior chamber, (hypopion) and suppuration commences around the remaining grains of powder, Hepar Sulph. is the remedy. Atropine, four grains to the ounce of water should be dropped into the eye, and repeated as often as necessary to keep the pupil dilated. Warm applications will be found useful in hastening the removal of particles by suppuration.

Burns and scalds of the cornea, as well as injuries from chemical agents, are often fatal to sight, as opacity follows many of these accidents. The treatment is the same as given for like injuries of the conjunctiva.

LXXXI.

Myopia in our Public Schools. Examination of the Eyes of 1,013 Pupils, with Report of the Refractive Condition Found.

BY W. P. FOWLER, M. D.

So much has been said and written concerning the prevalence of myopia among school children, that, with exception of bare statistics, I can hope to offer nothing new. The subject is of such importance however, that it should be constantly in the minds of physicians, and by them impressed upon parents, teachers and others, until by enforcement of certain rules, the percentage of near sighted-cases is reduced.

Before giving the result of my examination made in Rochester schools, it will perhaps be well to consider briefly the refractive conditions to which the human eye is subject.

When the normally refractive or emmetropic eye is at rest, *i. e.* adjusted for distance, parallel rays of light entering it are brought to a focus upon the retina, and the object from which they emanate is clearly and distinctly seen.

If the axis of the eye is too short, or the refractive power too low, parallel rays are brought to a focus *behind* the retina, or, more correctly speaking, they are not focused at all, but fall upon the retina in circles of diffusion. It is only by an effort of the accommodation, or the use of convex lenses, that vision can be made distinct. This condition is known as *hypermetropia*

Astigmatism, or irregular refraction of the eye, is occasionally met with.

Myopia, or near sightedness, is that condition in which parallel rays are united *in front* of the retina, in consequence of the optic axis being too long, or, exceptionally, the refractive power being too high. The increase in the antero-posterior diameter of the eye ball is due to inflammatory changes, with thinning and bulging of the ocular tunics near the entrance of the optic nerve. At this point the choroid becomes atrophied, and on examining the eye with the ophthalmoscope, the white sclerotic is plainly visible. In high degrees of myopia the retina is affected, and no glasses will render vision normal. If short-sightedness progresses, it may terminate in glaucoma,* choroidal hæmorrhages, detachment of the retina, *blindness*. The popular idea that near-sighted eyes are strong, because in old age glasses can sometimes be dispensed with, is one calculated to do much harm by leading people to regard myopia of little importance. A near-sighted eye is a diseased eye, and it should receive as much care as any other ailing organ of the body.

Short-sightedness is sometimes congenital, and often hereditary. Not infrequently it can be traced back through several generations. I believe, however, that it is more frequently acquired. Of 1004 near-sighted children examined by Dr. Cohn, in German schools, only twenty-eight had myopic parents. Other statistics give about the same result. A predisposition to bulging of the globe is probably present in cases that are acquired, but the exciting causes of near-sightedness are necessary for its development.

The disease very rarely originates after the twentieth year, and seldom before the fifth, thus leaving the period of school life for its appearance. This fact would suggest the idea that study and confinement in the school room had some influence in causing it. Statistics prove this to be the case. The illiterate are rarely myopic, while in one of the colleges at Oxford, 32 in 127 students were short-sighted. Of 410 students examined in the University of Breslau, nearly two-thirds were myopic. A few figures will also show that near-sightedness increases with the advancing years of school life. Among 2,265 eyes examined by Dr. Loring in the public schools of New York, the percentage of myopic cases among pupils under seven years of age was 3.5, and 26 in those between twenty and twenty-one. Dr. Lewis, of Buffalo, found between the ages of seven and ten, 13 per cent., and from sixteen to eighteen, 22.36 per cent. In my examination, made in the schools of Rochester, the ratio was 5.49 for those between five and nine years of age, and 19.56 for those above fifteen.

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*"Græfe's Archiv. f. O." iv. 2, 153; and ib., viii. 2, 304.

But what are the causes of myopia met with in school life? I believe them to be:

FIRST—The early age at which children are sent to school.

SECOND—Long study hours.

THIRD—Poor light.

FOURTH—Unsuitable seats and desks.

FIFTH—Imperfect ventilation.

The early age at which children are sent to school is without doubt a potent exciting cause of near-sightedness. The tissues being less resisting than in after years, distention of the sclera at the posterior portion of the globe is readily produced. As Dr. Angell has said, the eye, during early childhood, is a "growing organ, easily moulded, and its future, like other parts of the body, is to be very much what it is made by training, use and abuse." Children are required to be five years old before entering the public schools. It would be much better if they were not admitted until they reached their eighth, or even their ninth year. There are little ones in our schools under the prescribed age of five years, but this is not the fault of teachers. Said the principal of one of the schools when I called his attention to the fact, "I agree with you that some of the children in the lowest grade are not five years of age, but when a mother tells me that her child is five years old, or more, I cannot question her truthfulness. On one occasion when I expressed a doubt that a boy was old enough to enter school, his mother replied, 'Perhaps I know as much about the age of my child as you do'." Thus parents, not teachers, are responsible for the admission of these little ones to our school rooms.

The influence of *long study hours* in the production of myopia, by all who have given the subject attention, is considered very important. When, as in study, the eyes are almost constantly kept in a condition of convergence and accommodative effort, the ocular tension is increased, and short-sightedness encouraged. Especially is this true if the tissues are rendered lax by long confinement in the school room, want of exercise in the open air, and disregard of other hygienic requirements. Not only in school do pupils study. Many carry their books home, and pore over them until late at night. Besides this, there is a great deal of novel reading among school children, hours devoted to cheap editions of popular novels, printed in small type on poor paper.

The pernicious effects of our present high pressure system of education appear to be greater upon girls than upon boys. In the schools of Rochester, I found that while only 7.67 per cent. of the boys were near-sighted, 12.80 per cent. of the girls were so affected.

Imperfect lighting of school rooms tends to produce myopia. The light should enter from above, or from behind and at one side, so as to fall upon the page and not upon the eye. The newer school buildings in Rochester, so far as I have seen, are well lighted. In one of the older ones, however, I found that worst of all arrangements—the pupils facing the windows. In this position the full glare of the light falls upon the retina, which becomes fatigued. The book is meanwhile in shadow. Not only myopia, but other and equally grave affections of the eye are liable to be caused by studying day after day in a room thus lighted. In two

buildings I found the light insufficient in consequence of the windows being too small.

Unsuitable seats and desks.—The principal fault in the seats is that the backs slant too much. If the pupil sits so that his back is supported, the book on the desk is too far from his eyes, and to sit erect, unsupported, is so fatiguing that he soon bends forward and leans on the desk. This position brings the page too near the eye; the body being bent forward causes an increased flow of blood to the head and eyes; the action of the respiratory organs is interfered with, and the health, not only of the eyes, but the general system is endangered.

The height of the desk should vary with the size of the child. In the several grades the desks differ in height, but in no room did I see them adapted to the varying size of the pupils. Yet this is a defect easily remedied by constructing the desks with adjustable tops. If this were done, much of the stooping that is so injurious would be avoided.

Poor ventilation undoubtedly plays an important part in the production of near-sightedness. Some of the school rooms that I entered seemed to be well ventilated, but in many the air was close and oppressive. When pupils sit for hours in a room filled with impure air, they become languid and drowsy. They do not sit erect, but study with the face close to the book. The general health soon becomes impaired in consequence of inhaling the poisonous carbonic acid gas, the tissues lose their natural firmness, and myopia readily follows.

Most of the text-books are printed in good clear type, but in almost every instance upon white paper. Tinted would be far better.

It has been said that Germany is the nearest-sighted nation in the world; but, as will be seen by the Proceedings of the American Social Science Association, for 1875, myopia appears to be about as prevalent among the school children in the United States as in Germany. Many observers in this country have found that children of German parentage show the greatest percentage of near-sightedness. Others, however, have obtained different results. Dr. Liebold, of New York, found a less percentage of myopes among German children than any other nationality. In Rochester the rate is, among Germans, 10.46, among Americans, 10.38, among English, 9.90, and for the Irish, 8.74. This shows very little difference between Germans and Americans in this city. In all probability myopia is to-day nearly as prevalent in the United States as in Germany. A few more years of the "cramming" process to which school children are here subjected, and to the United States, not Germany, will belong the poor notoriety of being the nearest-sighted nation on the globe. The people in our country should bear in mind that though their push and ceaseless activity will accomplish wonders in certain directions, they will often, if applied to the education of their children, not only thwart the end they wish to attain, but lead to disease and suffering.

In conclusion, I desire to express my thanks to the Superintendent of Public Schools, through whose courtesy I was permitted to examine the pupils, and to the various principals and teachers who kindly granted me every facility for making my examination thorough and complete.

TABULAR STATEMENT OF REFRACTIVE CONDITION OF 1013 PUPILS' EYES.

The word "others" refers to those whose vision was not improved by spherical lenses.

YEARS.	EM.	H.	M.	OTHERS.	TOTAL.
5 to 9	216	47	16	12	291
9 to 12	301	63	42	6	412
12 to 15	166	56	36	6	264
15 to 22	27	10	9	0	46
	710	176	103	24	1013

YEARS.	EM.	H.	M.
5 to 9	74.22 Per Cent.	16.15 Per Cent.	5.49 Per Cent.
9 to 12	73.30 "	15.29 "	10.19 "
12 to 15	62.83 "	21.21 "	13.63 "
15 to 22	58.69 "	21.73 "	19.56 "

NATIONALITY.	EM.	H.	M.
American.....	70.12 Per Cent.	16.25 Per Cent.	10.38 Per Cent.
German	69.53 "	19.69 "	10.46 "
English.....	75.24 "	14.85 "	9.90 "
Irish.....	68.75 "	15.50 "	8.74 "
Others.....	62.22 "	22.22 "	8.88 "

MYOPIA.		HYPERMETROPIA.	
DEGREE.	NO. OF PUPILS.	DEGREE.	NO. OF PUPILS.
$\frac{1}{48}$	2	$\frac{1}{48}$	14
$\frac{1}{42}$	7	$\frac{1}{42}$	48
$\frac{1}{36}$	27	$\frac{1}{40}$	5
$\frac{1}{30}$	31	$\frac{1}{36}$	42
$\frac{1}{28}$	1	$\frac{1}{34}$	1
$\frac{1}{24}$	10	$\frac{1}{32}$	1
$\frac{1}{20}$	7	$\frac{1}{30}$	42
$\frac{1}{18}$	1	$\frac{1}{28}$	2
$\frac{1}{16}$	2	$\frac{1}{24}$	13
$\frac{1}{14}$	3	$\frac{1}{20}$	5
$\frac{1}{12}$	2	$\frac{1}{18}$	1
$\frac{1}{10}$	3	$\frac{1}{16}$	1
$\frac{1}{9}$	3	$\frac{1}{14}$	1
$\frac{1}{7}$	1		
$\frac{1}{6}$	2		Total, 176
$\frac{1}{4}$	1	MYOPIA,	Girls, 12.80 Per Cent.
	Total, 103		Boys, 7.67 "

LXXXII.

Kopiopia Hysterica.

By George S. Norton, M. D.

Many diseases of the eye are caused or influenced by certain uterine disturbances. It is not my intention, however, to consider the whole range of these affections in detail, but simply bring before this Society, one or two of the most frequent occurrence; and in so doing, I desire to first call your attention to a functional disturbance of the eye, which has received the name of "Kopiopia Hysterica." Very little, or nothing at all will be found in our usual text books upon this affection, with the exception of Forsters's description in Graebe & Sarmische's "Handbuch der Gesaumten Augenheilknisch." It is not, however, a new disease, but has hitherto, been discribed under the general head of asthenopia, and is due to reflex hyperæsthesia of the fifth and optic nerves.

Symptomatology.—The symptoms are very similar to those of insufficiency of the internal recti and ciliary mucles, dependent upon anomalies of refraction, though varying in several essential points.

Pain and Photophobia are the characteristic symptoms of which the patient complains. The character of the pain varies in different persons and at different times in the same person; is more often described as drawing, aching or pressing, though may be designated by all the adjectives in the English language, for these patients are particularly talkative when giving their symptoms. The seat of the pain also varies, but is more commonly in the eye, or around and behind the eye, in the socket, though it may extend up into the head or down into the face, especially the former.

These various sensations are often increased by work, reading, sewing, etc., and bright light, but are frequently present when there has been no straining of the eyes, thus differing from asthenopia found in errors of refraction. The intensity of the pain also varies greatly on different days or even on the same day, but there is no regular aggravation, as in ciliary neuralgia resulting from iritis, glaucoma, etc. At times the patient describes her pain as "terrible," but it never produces unconsciousness, or any objective eye symptoms, as conjunctival injection, lachrymation, swelling of lids and the like. As opposed to ciliary neuralgia in general, it is usually relieved at night.

The second characteristic symptom, photophobia, may be very moderate, or so intense they cannot bear the slightest ray of light. It is not usually the amount of light of which the patient complains, as the kind of light. Daylight is generally borne much better than artificial or reflected light. Often the reflection from silver on the table, from light shinging through a small opening in a window shutter, or the like, will produce great pain where little inconvenience is experienced from the brightest daylight.

An important point in the symptomatology of kopiopia hysterica is the frequent change in the symptoms. One day she will be comparatively

free from all unpleasant symptoms, the next she will suffer intensely, and on the third day the intensity of the symptoms will be the same, but of an entirely different character. In other words, you may obtain a perfect picture of a drug one day, and upon the next, another remedy will be as closely indicated, so you may, if the patient continues under your care, go through the whole Materia Medica from Aconite to Zinc and still make a good homœopathic prescription. Sleep, as we have said, always relieves the symptoms and the patient is never awakened by pain. The horizontal position also seems to relieve in many instances. Various trivial things aggravate individual cases. The principal *aggravation*, however, is *before and during the menses*, when the symptoms are always worse.

Careful examination of the eyes reveals nothing, the media are clear, the fundus normal, the degree of vision perfect, or, perhaps, slight amblyopia which is not, however, characteristic, no errors of refraction can be detected, or if we do find a low degree of hyperopia, its correction will not remedy the painful symptoms.

A great variety of general constitutional disturbances are present; such as sleeplessness, irritable disposition, palpitation of the heart, pains in the pelvis, small of the back and extremities, loss of appetite, constipation, etc.; in fact all the symptoms usually found in hysteria, with the exception of the most serious, as attacks of crying, globus hystericus, convulsions, paralysis of sensitive and motor nerves, etc.

Ætiology.—Let us now turn to the cause of this train of eye symptoms; and in so doing we find the subject has been pretty well investigated by Prof. Freund, of Breslau, who has made many sections and carefully studied the pythological changes found in the uterus. The disease may be designated as a *chronic atrophic parametritis.* It developes first as a hyperplasia of cells in the parametrium which surrounds the cervix uteri, and from this point extends throughout the whole parametrium, and to the cellular tissue of the pelvis surrounding the rectum and bladder. The various ligaments also become hypertrophied, particularly the broad ligament, (lower portion,) its layers becoming firmly united to each other.

The chief nerves and bloodvessels of the uterus, being in connection with the parametrium, are involved in this new formed tissue, particularly the bloodvessels which are very much engorged. Later on in the course, changes are seen to take place in the hyperthrophied tissues; they begin to atrophy and develop true cicatricial tissue, which, contracting upon the delicate nerve cells and filiments, become the source of the reflex symptoms found in the eye and other organs.

In the beginning of the inflammation we find congestion of all the pelvic organs, catarrhal condition of the vagina, ulceration of the cervix frequently, and *profuse menstruation.* One side or the other of the cervix is usually first affected as shown by the pain and sensativeness to touch. The cervix is commonly drawn to this side while the body of the uterus inclines to the opposite side. In the later stages the pelvic cellular tissues become atrophied, the contraction of scar tissue is present, the bladder and rectum are more plainly detected in the pelvis, the uterus lies deeper, is more contracted but thick, while the cervix becomes fixed and sensative to touch, especially at the sides, and even the pelvic bones are sensitive,

especially the sacrum and coccyx. At the same time the menses become more and more scanty and painful until their early cessation occurs. It may be mentioned here that all the above symptoms are not always well marked in this form of parametritis, as they vary greatly in degree in individual cases, but the above are the most characteristic.

This form of uterine disease is not rare and may be present in either married or unmarried women, and always gives rise to reflex irritation, though not necessarily in the eye.

Course and Prognosis.—The course of kopiopia hysterica is very chronic and the prognosis unfavorable, providing the above described serious pathological changes have taken place in the pelvic organs. The eye symptoms may, however, be present in the very earliest stages of the uterine disturbances, even hefore the characteristic symptoms are complained of. At this time the prognosis is more favorable, especially under homœopathic treatment.

Diagnosis.—Reflex irritation from other organs may cause a similar train of eye symptoms, though very rarely.

About the only disease of the eye with which kopiopia hysterica may be confounded, is asthenopia resulting from errors in refraction, and, between these two, it is of the greatest importance that a differential diagnosis be made for the treatment is so wholly different in the two affections. The symptoms as we have seen, are very similar in both, except in well pronounced cases, so that the only sure point in the differential diagnosis, is a careful test of the refraction. If an error in refraction, either hyperopia myopia or astigmatism should be present it must be corrected by proper glasses. With these glasses and careful use of the eyes, the weakness of eyes will be relieved, while if reflex irritation is the cause, the refraction will either be found emmetropic or the correction of any error will not relieve the symptoms. It must also be remembered that where you find one case of kopiopia hysterica, a hundred cases of asthenopia from irregular refraction of the eye will be found.

Treatment.—We must first correct any error of refraction, if present. Then regulate the amount of use of the eyes, not allowing their use for near vision when pain or any unpleasant-sensations are experienced. The employment of colored glasses, smoke or blue, may be advised when the patient is compelled to be in a very bright light, but two constant use is often injurious, as the eye, becoming accustomed to a subdued light, will not tolerate ordinary day light.

Our chief reliance, however, must be placed upon internal medication, and there is no one remedy especially indicated, for more here than in any other disease, if possible, the prescription must be based upon the totality of the symptoms. Among the remedies especially to be thought of, may be mentioned Lilium tig., Sep., Sulph., Calc., Puls., Gels., Conium, Nux v., Cham., etc., etc.

LXXXIII.

Two Cases of Otitis Media Suppurativa Resulting from the Use of the Nasal Douche.

BY W. P. FOWLER, M. D.

CASE FIRST.—A. Y., aged fifty-four years, consulted me Jan. 25th, 1876, in regard to pain and loss of hearing in his right ear. There was also profuse discharge. He was a man of remarkably fine physique—large, powerful, and well nourished. His story was as follows:

For about two years previously he had been troubled somewhat with post-nasal catarrh. The discharge was at times almost imperceptible, but usually rather profuse, especially mornings, and muco-purulent in character. At no time had he discovered blood with the secretion. Nasal respiration had never been impaired to any extent. Through the advice of his family physician, he had two months before commenced throwing a solution of salt and water up the nostril with a Weber's douche. No unpleasant results followed until five days before consulting me, when, on using the douche, he "felt a strange sensation of fulness in his right ear, with roaring." Almost immediately the ear began to feel tender, and in a few hours pain set in. At first it was slight, but rapidly increased in severity, and "extended up into the head, as well as down the side of the neck." Large powders of Morphia were prescribed, but these did not have the desired effect. Hot applications to the side of the head afforded more relief than anything else. Hearing became blunted, and finally seemed lost entirely. The fourth day pus escaped from the ear, and some relief from pain followed. Hearing remained the same.

On examination, I found the right external meatus filled with thick yellow pus, which was removed by syringing with tepid water. The tympanic membrane was "sodden," perforated, and injected at its periphery and along the handle of the malleus. The walls of the osseous meatus were also red and swollen. In the mastoid region there was some redness and sensitiveness to touch. The submaxillary and cervical glands were very tender and somewhat enlarged. Hearing R. E. gone, L. normal. The pharyngeal mucous membrane was relaxed, slightly thickened, and secreting rather profusely. No symptoms of acute inflammation were observable. The tongue had a thick yellowish coating at its base.

Treatment.—As there was still considerable pain in the ear, the patient was directed to drop warm water into the meatus, and to keep the side of his head warm by applying hot cloths as previously. I carefully inflated the ear by Politzer's method, and advised syringing with tepid water three or four times a day. Merc. prot. 30th was prescribed—a dose every two hours. Of course all further use of the nasal douche was forbidden. This precaution, however, was unnecessary, my patient declaring that under no circumstances whatever would he again "make use of the contrivance," being thoroughly convinced that it had been the cause of his trouble.

Jan. 29th. Patient had been seen daily, and treatment as given above continued. Pain and tenderness had disappeared. The discharge had considerably diminished, and tinnitus was no longer present. The tympanic membrane still had a "boggy" appearance, but no redness was perceptible. Hearing had begun to improve, the distance for the watch being one inch. The walls of the meatus were nearly free from redness and swelling. Tongue clean. ℞ Merc. prot. 30th, a dose once in three hours.

After this the patient was seen every other day. Inflation, syringing, and Merc. were continued. Improvement was gradual. In two weeks the discharge had ceased, and R. H. = $\frac{4}{20}$. All symptoms of inflammation had disappeared. The drum-head was still somewhat hazy, but intact, the perforation having healed. Nux vom. was now given on account of gastric and other symptoms that seemed to call for that remedy. Syringing was discontinued, but Politzer used as before.

March 7th. Membrana tympani had cleared up, leaving no traces of the perforation. Pharynx gave no trouble, having improved much since douche was discontinued, R. H. $\frac{19}{20}$. Patient discharged cured.

CASE SECOND.—May 20th, 1880. Mr. E. S., aged 29 years, came to me complaining of pain in his left ear, vertigo, and tinnitus aurium. His occupation was clerk in a dry goods house. There he remained month after month, with little or no exercise in the open air. Although naturally strong and healthy, the confinement had rendered him weak, nervous, and irritable. Digestion was impaired, and his bowels were very irregular. His weight, usually one hundred and fifty pounds, was reduced to one hundred and thirty. He had always been temperate in his habits. The history of his aural trouble he gave as follows:

The pain had commenced three days previously, but was not severe until the day before consulting me. He expressed the belief that his ear difficulty was produced by using the nasal douche. For about two years past he had suffered from naso-pharyngeal catarrh. There was almost constantly a discharge of glassy mucus, but the least cold greatly aggravated the difficulty, and at such times the discharge assumed a muco-purulent character. He had used patent medicines in profusion, and had been treated by several physicians, but obtained little or no relief. Finally three weeks before I saw him, he had purchased a nasal douche, and commenced using it in the customary way. Simple cold water was injected into the nose. Several times he noticed that his ears felt somewhat painful and "strange" immediately after using the douche, but nothing of an alarming nature occurred until three days previously, when he distinctly felt the cold water pass up into his ear, which very soon began to ache." The pain gradually increased until he came to my office.

At that time it was severe, throbbing, and extended all over the left side of his head. The face, usually pale, was somewhat flushed. Pulse ninety-five and full. Tongue had a slight whitish coating. Pharyngeal mucous membrane thickened and catarrhal, but no indications of acute inflammation existed. Inner third of left auditory meatus, and the membrana tympani very red and swollen, L. H. $\frac{P}{20}$ R. $\frac{20}{20}$.

Patient was advised to apply hot salt bags to the side of his head, and

to douche the ear with warm water every half hour or hour until pain was relieved. ℞ Bell. 3d every hour.

The next day, March 21st, pain was much less. During the night the drum-head had given way, and quite a profuse discharge of pus followed. Tinnitus was almost entirely relieved, L. H., $\frac{P}{20}$. ℞ Bell. 3d as before, and carefully inflated the ear by Politzer's method. The ear syringe was now used in place of the douche.

It is not necessary to give a detailed account of the case from this date. In three weeks the patient was discharged with L. H., $\frac{20}{20}$. Merc. viv. 30th was given in place of Bell. after the fifth day, and the ear inflated at each visit.

Remarks.—Quite a number of cases similar to these have been reported by different physicians, and it is a fact generally known in the profession, that the anterior nasal douche is liable to cause serious aural disease. My object in presenting this paper is to impress old truths rather than to advance new ones. There is, I think, sufficient reason for sounding an additional note of warning on this subject, for the douche is still recommended by physicians, and extensively used by the people.

Although I report only two cases of otitis resulting from its employment, several others of a similar nature have come under my notice. They are not included in this report for the reason that the history was not so clear as in those just presented.

"Why use the nasal douche at all?" is a question that has often occurred to me. That it is an effectual means of cleansing the naso-pharyngeal space is a generally admitted fact—but the posterior nasal syringe is harmless, and will do everything necessary in this direction. The risk attending the use of the nasal douche is so great, that in my opinion, it should never be employed.

LXXXIV.

A Condensed Report of Sixty-three Cases of Inspissated Cerumen.

By Wm. P. Fowler, M. D.

CASE FIRST.—Miss F, aged 21, consulted me March 20th, 1875, complained of roaring in the ears and impaired hearing. Until within a week had heard as well as usual. Had been in the habit of picking the ears "to keep them clean."

Examination.—Both external auditory canals filled with dark brown, almost black cerumen. Could hear the watch only when held close to the ear.

Treatment.—Removed the wax by syringing with tepid water. I now found on examination that the external auditory canals were inflamed, drum heads normal with exception of injection caused by syringing, H. 18—20. Aconite 3d was prescribed to allay inflammation of the canals. In two weeks the ears presented a normal appearance with H, 20—20.

CASE SECOND.—Mr. H. C, aged 50, seen April 2d, 1875, was very deaf, especially in left ear. Stated that large quantities of wax had been removed three years before. Tinnitus aurium had been very troublesome for a long time. Found both canals loaded with very hard cerumen. The mass in the right meatus was readily removed, but warm water had little effect upon that in the left. Cosmoline was dropped into the canal, and by the next day I found the plug so softened that it was soon brought away. The wall of the left meatus was ulcerated from the pressure of the impacted mass. Left M. T. was thickened and depressed. R. H. $\frac{1}{20}$ L. H. $\frac{3}{240}$. Prescribed Calendula one part tincture to five parts water, to be warmed and dropped into the ear twice a day. Under this treatment the ulcers in the canal quickly healed. Was under treatment for several weeks for chronic catarrh of the middle ear.

CASE THIRD.—Mrs. E, aet. 42, came to me June 7, 1875, complained of itching in the ears, "so much," she said, "that she was obliged to pick them a great deal." Had been in the habit of keeping them free from wax in this way for years. Large masses of dark, hardened cerumen filled the osseous portion of the canals, which were diffusely inflamed. Removed wax by syringing, after which H. $\frac{19}{20}$. Other treatment was directed to the original difficulty, diffuse inflammation of the meatus.

Cases fourth and fifth were similar to Case first.

CASE SIXTH.—Master Geo. M, aet. five years, brought to me by his father, July 16, 1875. His parents had noticed that he did not hear as well as usual. Had "cleaned" his ears thoroughly every day, and for that reason thought the difficulty could not be due to wax. Examination revealed plugs of cerumen at the inner extremity of the auditory canals. After removing the wax in the usual way, H. $\frac{18}{20}$. The meatus was slightly inflamed from efforts made by parents to clean his ears. They had pressed the cerumen little by little deep into the canals, and thus produced the trouble.

CASE SEVENTH.—Miss C, aet. 15, seen Sept. 12th, 1875, been somewhat deaf for two years, but not alarmingly so until a short time before consulting me. There was much buzzing in the ears, throat catarrhal. Syringing brought away large quantities of hardened wax. R. H. $\frac{10}{20}$, L. $\frac{3}{20}$; both drum heads dull and depressed. Eustachian tubes partially closed. Chronic catarrh of the middle ear accounted for the long standing deafness.

Case eighth much the same as case second.

Cases ninth, tenth, eleventh and twelfth were similar to case seventh.

CASE THIRTEENTH.—H. C., a young man of twenty years, seen February 10th, 1876. Tinnitus and hardness of hearing in right ear, noticed only a few days previously. L. H. normal; R. H. $\frac{2}{20}$. Right meatus occluded with cerumen. Removal by syringing. H. was then normal. Ears appeared to be healthy. Prescribed Con. 30th to prevent a recurrence of the difficulty.

CASE FOURTEENTH.—Mr. A, 50 years of age, came under observation March 16th, 1876. Deaf for ten years but for last two weeks trouble much aggravated in left ear; also more tinnitus than usual. Left meatus filled with cerumen; right clear. When wax was removed H. $\frac{1}{20}$ for both ears. The chronic deafness was due to catarrh of the middle ear.

Cases fifteenth and sixteenth like case third.

Case seventeenth similar to case fourth.

Case eighteenth similar to case first.

CASE NINETEENTH.—Charlie B, act. 10 years, been subject to attacks of ear ache since 4 years of age. Parents had at times noticed a discharge from his left ear. Deafness had rapidly increased for several weeks. Hardened cerumen closed both canals; after this was removed found that left M. T. was perforated. R. intact, but cicatrix of old perforation remained. R. H.=$\frac{5}{20}$; L. $\frac{3}{20}$.

Cases twenty, twenty-first and twenty-second very much like case seventh.

Case twenty-third like case first.

Cases twenty-four and twenty-five similar to case two.

CASE TWENTY-SIXTH.—Mr. H., aged 24; ten days before consulting me had become suddenly deaf in left ear, left meatus, impacted and right partially filled with cerumen, which was removed in the usual way. Ear appeared to be healthy. Of the remaining thirty-seven cases that I have had to report, nine were similar to case one; five to case two; four to case three; two to case four; twelve to case seven; three to case thirteen and two to case fourteen.

Remarks.—The cases before us tend to confirm the idea advanced by most authorities, that impaction of cerumen is usually complicated with some other affection of the auditory organs. In only five of these sixty-three patients did I find the ears apparently healthy after the wax was removed. Twenty-one had diffused inflammation of the meatus; in thirty-five there was chronic catarrh of the middle ear, and in two, chronic purulent otitis.

The habit of picking or swabbing out the ears, is, I believe, a frequent cause of excessive secretion of cerumen. This practice always irritates, and frequently produces inflammation of the external auditory canal.

In treating these cases of course the first thing in order is to remove the wax. This is best accomplished by syringing with tepid water. In nine cases out of ten the mass is readily removed, but in the tenth perhaps a little time, patience and skill are required. When the cerumen is very dense, it is advisable to first soften it by dropping Cosmoline in the ear. In twenty-four hours after doing so, syringing will usually dislodge it. If, however, it still remains immovable, it will be necessary to gently lift the edges of the mass away from the walls of the meatus, so that the water will pass behind the wax, which will now be quickly thrown out. Dr. Buck's fenestrated scoops are admirably adapted to these manipulations. It is very important to remove all of the cerumen for if any remains in contact with the tympanic membrane, very little relief will be afforded. No physician should attempt to remove inspissated cerumen unless he possesses, and is well skilled in the use of aural specula, and the mirror, for without these he can seldom be sure that the ear is impacted with wax, and can *never* know that the entire mass has been removed. When the cerumen is dislodged, treatment is usually only just begun, for the disease that underlies the excessive secretion, requires careful and oftentimes protracted attention. Of the various remedies that are mentioned in our

text books, for the rapid and abnormal accumulations of wax, only one (Conium) has, in my hand, proved to be of value. A great number of drugs may be called for, however, in treating those conditions of the ear which so often accompany and give rise to excessive action of the ceruminous glands.

LXXXV.

Electricity in Aural Diseases.

By HENRY C. HOUGHTON, M. D.

Unsupported assertions regarding any subject matter in medicine or surgery are of no value whatsoever. An hypothesis may lead to correct conclusions, but until the supposition ends in the fact, it is not entitled to much consideration. No one matter has caused more extremes of assertion than the value of electricity, but it has long since passed from the domain of the charlatan to the foremost place among the imponderable agents used for human welfare.

As regards the value of electricity in diseases of the ear we shall find many marked extremes. Roosa says, "This is an agent whose real value has been much underestimated in many departments of medicine, but which I am inclined to believe has been over-rated in the treatment of aural disease. The effect of electricity on the acoustic nerve will be fully discussed in the third part of this volume, while it is only necessary to say at this point that not much is to be expected from the use of electricity in chronic non-suppurative inflammation of the middle ear." In part third of his work, he gives the arguments pro and con, and leans to the side of those who claim that the sounds of Brenner's formula, are due to muscular contraction. Burnett in his admirable treatise, favors Brenner's claim of direct stimulation of the acoustic nerve, but in commenting on Weber-Diels, electrization of the eustachian tube and tympanum, he does not accept that writer's view; but suggests that the physical manipulation of the diseased parts is the cause of relief and not the passage of the electric fluid. I hope to show that relief does follow the passage of the current, when the manipulation as performed by Weber-Diel is omitted. In contrast to the opinions of Roosa and Burnett, Prof. J. C. Blake, of Boston, and America has no superior authority, supports by his own observation the claims made by Brenner and others. In Vol. I. of Knapp's Archives, Dr. W. Erb, of Heidelberg, confirms Brenner's researches, and in his closing remarks quotes Brenner as follows: "*The examination of a diseased ear, will only be complete when the auditory nerve has been examined by means of the galvanic current.*" I might quote from other authorities to show that the sceptics are found to be those who have not used electricity to any extent, and the believers, those who have made careful and full use of this agent.

I do not propose to go into an extended consideration of the philosophy of electricity, but to touch a few points bearing directly on our theme.

In the treatment of the ear we deal with, (1st) skin and mucous membrane, (2d) muscle, and 3d nerve.

The action of the galvanic current on the skin is to produce a burning which becomes painful as the current is more intense, if long continued, vesicles form, and even hemorrhage has resulted in some cases. The action of the two poles is markedly different, serum thrown out at the anode, and the change in tissue is not very marked. At the cathode an inflammatory aureola is formed, the serum is acid and becomes dark in color. Faradization causes a more decided pricking pain, and changes in superficial blood vessels, but only a very powerful current affects the deeper tissues. Faradism acts more immediately on the vaso-motor nerves, causing, first, contraction of the blood vessels, afterwards dilatation.

Electricity, either as galvanism or faradism, increases the action of mucous glands, and its chemical effects are more prompt and serious than upon the skin.

The relation of muscle and motor-nerve is so intimate that we consider them together. Electricity increases the functional activity of muscular tissue by its action on nerve or on muscle fibre or on both. Althaus says, "the galvano-muscular contractions do not take place in consequence of the motor nerves simply conducting the electric fluid to the muscles, although the nerves are undoubtedly conductors of electricity. But the mere conductivity of the nerves does not explain the physiological effect produced by their electric stimulation; for if a wet thread be tightly applied to a nerve so that it becomes thin, and reduced to its neurilemma, no contraction can be caused in the muscles animated by it, on applying the electrodes above the point where the nerve has been tied, although by such a proceeding the propagation of electricity is not arrested, since the wet thread conducts equally well as the nerve. Again a few drops of Ether applied to any point of the nerve, will suspend the contraction of the muscles, if the electrodes are placed at or above the point where Ether has been applied, the contractions, however, will reappear when the effects of the Ether have passed off. Finally, if the nerves of a frog be galvanized, which has been poisoned with Woorara, no contractions occur in the muscles animated by these nerves; although Woorara does not affect the electric conductivity of the nerves which remain intact; nor the contractile power of the muscles, for they are seen to suffer commotions, if the electric current is applied directly to their tissues without the intervention of the nerves, but the contraction fails to appear because Woorara destroys that peculiar force by which the nerves are enabled to produce the play of the muscles. *Hence it results that contractions of the muscles cannot be produced by galvanic stimulation of the motor nerves, unless the nerves be in a state of integrity; and that the galvanic current acts in this manner by rousing the vital properties of the motor nerves.*" Space will not permit reference to the laws of electricity as enunciated by DuBois, Reymond, Pflüger and others, but it may be succinctly stated, that galvanism is specially adapted to promote the function of nerve tissue by action on large trunks and faradism to promote muscular activity by direct action on muscular tissue and small branches of motor nerves.

The nerves of special sense each react to the galvanic current. Flashes of light occur on closing and opening the circuit if the poles are applied near the eye. Action on the olfactory nerve produces a peculiar smell. The gustatory nerve responds to very feeble currents, causing the "galvanic taste," and we should naturally expect that the acoustic nerve would not be an exception, but it is difficult to produce a satisfactory reaction of the acoustic nerve on account of the nauseau, vertigo, and other symptoms produced by a large number of elements introduced into the circuit. Brenner, of St. Petersburg, first promulgated the reaction of the nerve, thus:

Ca., Ma., S.=Cathode, making, sound.
Ca., Cl., S. >=Cath., closed circuit, sound gradually vanishing.
Ca., Br., O.=Cath., breaking, nothing.
An., Ma., O.=Anode, making, nothing.
An., Cl., O.=Anode, closed circuit, nothing.
An., Br. O.=Anode, breaking, feeble short sounds.

Exceptions were taken to Brenner's views, and a war of words has followed, but, as I have said, the balance of authority is with Brenner.

If then galvanism acts upon skin, mucous membrane, motor nerve and muscle, as well as upon other nerves of special sense, we may expect it to be of value in the treatment of aural diseases.

The known in the therapeutics of electricity is to the unknown, as 0 to 00. We stand amazed at the utilization of this force in other departments of life's necessities, but I believe we are to see equally valuable applications of electricity as a curative agent. Electricity is allied to vital force as vital force is allied to spiritual force, and the human mind and soul stands as yet in the early dawn of a knowledge and application of either.

That the passage of the galvanic current increases the functional activity of the auditory apparatus, must be conceded, whatever may be our view as to the part or parts of the same that is influenced thereby. The improvement in audition is marked for musical tones, the tuning fork being heard at a greater distance and for a longer time, also the perception of higher tones; i. e., musical tones caused by a greater number of vibrations. The same is true of the watch test, and later, of the spoken and whispered voice.

In some cases I have noted the fact that the gain for the watch did not keep pace with the gain for the voice, usually the gain corresponds. After the lapse of a number of hours the tests show a fall-off from the results immediately after galvanization. In cases where torpor of the nerve was complicated by tinnitus aurum, galvanization modified the subjective sounds, and in cases permanently relieved, the tinnitus did not rise to former intensity from sitting to sitting. If tinnitus rises to same after one sitting before the following one, the prognosis is unfavorable. In many cases of so-called hyperæsthæsia of the auditory nerve, I am convinced that the irritation was due to lesions in the tympanum or the eustachian tube or both, for the passage of a mild current abolished the subjective sounds, a current far short of that required to cause reaction of the auditory nerve according to the formula.

This leads me to the consideration of the action of the faradic as well

as the galvanic current in the middle ear. In my early use of electricity in common with many others, I depended upon the galvanic current, applying the electrodes externally and obtained good results. In Vol. XI., (N. Y. State Homœopathic Medical Society Transactions), will be found an article giving some results, and at the meeting of that year, instruments were exhibited fitted to accomplish the same end as those proposed by Weber-Diel. An eustachian electrode, passed to the orifice of the tube, was attached to the anode, and a suitable sponge electrode, fitting the external meatus, to the cathode. After the passage of the galvanic current the inflation by Politzer's method, was more easily accomplished, and in many cases, obstinate occlusion overcome. After a time, thinking that the passage of galvanism would prove tonic to the muscles of the pharynx, a tongue electrode was substituted for the eustachian one, and proved even better, if possible, at all events more convenient, as the passage of an electrode through the nose is "not to be sneezed at." In Vol. V., of Knapp's Archives, Prof. J. C. Blake reviews articles by Fueld and Isard, on the use of electricity in the treatment of tinnitus aurium. This became the occasion of an article by the late E. B. Squier, M. D., whose early decease, we who knew him well, must mutually regret. As chairman of the bureau, I added some remarks on the paper, arguing strongly in support of Isard's deductions, but the discussion led me to use faradism in cases not relieved by galvanism, and I am now ready to admit that it, or the alternate use of it, and galvanism have cured cases of tinnitus not controlled by galvanism alone. Certain well established principles guide me in the treatment of deafness, whether complicated by tinnitus or free from subjective sounds. Galvanism is profoundly alterative, chemical in action, rousing vitality and taxing it to its utmost. Hence its value in the early treatment of a paralysis, as for instance of an extremity, by action on large nerve trunks. Later faradism will supplement the work by stimulating single muscles by direct application. So in dealing with the ear, the muscles of the pharynx, the eustchian tube, and also the muscles of the middle ear, are roused by the galvanism, the mucous glands are made active, the *nutrition* of the whole *track* is promoted and we enter upon a new life. Later in the treatment faradism can be used to advantage, and to a greater extent, but it is my practice to use the galvanism at intervals, perhaps every third or fourth sitting in a succession of sittings. Although this method does not show as brilliant results as that proposed by Campbell, i. e., flooding the tympanum with a solution of Iodide of Potassium, and then passing galvanism, yet it is more free from risk, as his method causes a low grade of inflammation and the operator must be very cautious and guard against acute inflammation of the middle ear.

I give the details of a few cases treated:

Oct. 3d, 1879, Mr. J. W. C., male, aged 40, had been deaf many years and supposed there was no hope in his case, as he had been told that the "drum heads were destroyed." Hears watch, R. $\frac{2}{240}$, L. $\frac{34}{240}$. Both membranes were badly scarred, and small perforations existed, on the right side in the posterior inferior quadrant; on the left in the anterior inferior quadrant. The eustachian tubes were dilatable; the pharyngeal mucous membrane was thick and red, tonsils hypertrophied.

He was treated with the galvanic current passed through the eustachian tubes, later faradism was used.

March 1st. Hears R. $\frac{40}{240}$. L. $\frac{5}{20}$.

April 1st. Hears R. $\frac{9}{20}$, L. $\frac{10}{20}$.

May 1st. Hears R. $\frac{18}{20}$, L. $\frac{18}{20}$.

Merc. prot. was given through February and March. *Baryta mur.* during April, the latter for snapping sounds, associated with extra——— of eustachian tudes.

W. H. P., male, aged 45, Oct. 19th, 1877. In March, 1877, had acute inflammation of middle ear, now has a constant hissing in the ear and loss of power. Hears R. $\frac{4}{20}$, L. $\frac{10}{20} \times \frac{1}{12} = \frac{10}{240}$. A mild galvanic current was passed through the eustachian tude. Hears $\frac{20}{240}$. Oct 22d, R. $\frac{6}{20}$, L. $\frac{16}{240}$. No hissing; galvanic current; fifteen elements; Liemans and Helschers. R. $\frac{7}{20}$, L. $\frac{2}{20}$. Head feels clearer, Quinine.[5] Oct. 26th R. $\frac{7}{20}$, L. $\frac{2}{20}$. After exposure and loss of sleep the subjective sounds returned; fifteen elements, 16,000° resistance; hissing ceased at once. R. $\frac{8}{20}$, L. $\frac{32}{240}$.

Nov. 5. R. $\frac{10}{20}$ L. $\frac{30}{240}$; hissing; ten elements, 16,000°, noise ceased at once. R. $\frac{16}{20}$, L. $\frac{30}{240}$, Md.[30].

Nov. 9th, after cold in head, L. fell to $\frac{20}{240}$, used tongue electrode, and passed ten elements, gain to L. $\frac{35}{240}$, and R. remained at $\frac{20}{20}$.

Nov. 15. R. $\frac{20}{20}$, L. $\frac{4}{20}$.

At date of writing this article, the case has held up to standard on the R., and the L. has been so relieved that the patient did not feel the necessity of treatment, although my purpose would be to continue the sittings until the hearing on the left side rose to $\frac{20}{20}$, which I am confident could be accomplished.

Chronic catarrhal inflammation of the middle ear.

"A. B. C., physician, age 40, Dec. 11th, 1874. Has had naso-pharyngeal catarrh for a number of years; lately he has noticed that upon attempting auscultation in his daily practice, he was unable to detect murmurs as well with the left as the right ear.

R. M. E. normal; M. T. normal; E. T. dilatable; hears $\frac{20}{20}$.

L. M. E. normal; M. T. retracted, but mobile; E. T. dilatable, after two trials by Politzer's method of inflation. Hears $\frac{24}{240}$.

"After a few treatments it was clear to me that the lesion was due to lack of motor power in the tympanic muscles as the eustachian tube was readily dilated to Valsalva's experiment, and the membrana-tympani was easily moved by Siegle's speculum. Hence the galvanic current was employed. The electrodes were placed in such a manner that both the cerebro-spinal and the organic nerve supply to the tympanum, were brought into the circuit, the positive pole being placed over the tri-facial in front of the auricle, the negative over the superior cervical ganglion at the angle of the inferior maxilliary. For one month the applications were made three times each week.

Jan. 13th. Hears $\frac{5}{20}$. During the second month the treatment was more irregular.

Feb. 13th. Hears before treatment $\frac{14}{20}$, after treatment $\frac{20}{20}$.

Feb. 18th. Hears $\frac{20}{20}$.

Oct. 6th, 1879. The hearing has remained good ever since.

LXXXVI.

Acute Suppuration of the Middle Ear.

BY F. PARK LEWIS, M. D.

The loss of hearing, the offensive discharge, the obstinate resistance to all therapeutic resources, and above all the possible endangering of human life, accompaniments of chronic otorrhœa, with which we are all but too familiar, render it especially desirable that the acute stage in which it is more amenable to treatment be carefully guarded, and remote unfavorable results possibly avoided; for unless the disease be controlled, and the integrity of the tissues quickly restored, conditions are allowed to obtain which at best are prejudicial to our early cure, and may be sufficient to place the hearing power beyond the possibility of complete recovery. If, on the other hand, the progress of the inflammation be closely watched, and suitable treatment employed a cure may result without any visible manifestations of the results of the disease. Even the perforation of the membrani tympani may have ensued.

The causes of acute suppuration of the middle ear are numerous and varied. They may be either general or local. Individuals with low vitality and great susceptibility to atmospheric changes, seem more liable to be attacked. As might be expected, those having a catarrhal or tuberculous diathesis are frequently found among the sufferers. Children also furnish a large proportion of the cases. In one hundred and eighty-two cases analyzed by Knapp—in Archives of Otology, Vol. VIII., page 5—fifty-nine, or twenty-two and forty-two hundredths per cent., occurred before the tenth year. Exposure, while heated, to draughts of cold air may excite an attack of acute suppurative otorrhœa, and not unfrequently the disease may be traced to the breezes blowing through the open window of a railway train directly upon the ear. Among the direct causes is the striking of any foreign substance upon the drum head, a blade of straw, a slate pencil, or some of the innumerable contrivances for removing ear wax. Insects occasionally fly into the ear, and before they can be removed their struggles may have caused an inflammation which results in suppuration. The cold sea water filling the ear while bathing is responsible for a large proportion of the cases which occur at our popular summer resorts. By far the greater number of instances are found, however, in those patients in whom an inflammatory condition of the throat forms a complication. In the very thorough analysis of a large number of cases occurring in private and dispensary practice cited by Knapp, thirty-seven and thirty-six hundredths per cent., were directly due to pharyngitis and naso-pharyngitis. Coryza and assignable exposure are charged with twenty-six and thirty-seven hundredths per cent., making these causes alone responsible for over three-fifths of all the cases which he was called upon to treat. Sea bathing, scarlet fever and diphtheria follow in the order named; while measles, pneumonia mumps, nasal douche, eczema of the ext. auricle and varioloid have each in a few cases been the exciting cause of acute suppuration of the middle ear. Scarlet fever has certainly not

been allowed as high a percentage as was justly due, because so few cases come to the aurist before they have reached the chronic stage, and do not therefore, properly come within the limits of this report. But in scarletina, perhaps, greater vigilence is needed in protecting the tympanum than in any other systemic disease. The pharyngeal inflammation is so readily transmitted along the eustachian tubes to the middle ear that there being no outlet, the drum head is perforated, and an otorrhœa established.

A feeling of fulness in the ear, with perhaps a slight difficulty in hearing, and some small shooting pains herald the approach of the disease, a chill or a series of creeping chills running up and down the back may be experienced. This may be followed by a little fever, but in uncomplicated otitis media the constitutional symptoms are not likely to be very marked, soon the pain in the ear grows more intense until at length it becomes agonizing, if the membrana tympani be early examined a congested line will be found extending along the malleus handle. The periphery of the drum head soon assumes a pinkish hue, and ere long the whole surface presents a reddened aspect, all of these cases are originally of a mucous nature, but they soon assume a purulent form. In the more serious cases the fever grows higher and alternates with chills, the tongue grows dry and brown, the pulse rapid and weak. Should the suppurative inflammation extend to the mastoid cells, it will be manifested by an aggravation of all the symptoms. Cerebral dullness, or perhaps quiet delirium will appear, swelling of the cuticle behind the auricle will also be found with redness of the part and great sensitiveness to pressure. When this condition obtains, if it be not relieved, a fatal issue may follow.

Among all of the conditions accompanying acute otorrhœa none are so apt to obscure the disease, and mask its early stages as scarlatina. Here the violence of the systemic attack, the swollen throat, and cephalalgia divert attention from the ear, and we become aware of its implication only where a purulent discharge announces the destruction of the drum head. As I have said, any inflammatory condition of the throat should direct our attention to the ear, and the first manifestations of pain or fulness referred to that region should receive our notice. Examinations of the membrana tympani should be made during the continuance of an exanthem, and any changes in its color—its translucency—its curvature, or its reflection should be noted. Duly warned of a coming attack, measures may be taken, if not to avert it, at least to modify its severity.

TREATMENT.

The treatment of acute suppurative otorrhœa may be considered as hygienic, local, medical, and surgical.

In individuals of a catarrhal nature subject to aural disease, much can be done to overcome this susceptibility, the rapid hand or sponge bath with suitable physical exercise is decidedly beneficial. Heavy scarfs and comforters in winter, by keeping the throat over warm, render it doubly sensitive and more readily attacked when exposed. It is always more desirable to accustom the throat to bear the cold without extra wrappings, sleep and diet must also receive proper attention.

The disease having manifested itself, the first essential is rest. The recumbent position will tend to lessen the heart's action and greatly aid in controlling the inflammatory process, as it is "only an ear ache," it is

often difficult to convince a strong, robust patient of the necessity of quiet, but here as with the more vital organs early care will many times save weeks of suffering.

Among the local agents employed none are more universally useful than hot water. This may be dropped into the aching ear, as warm as can be borne, and it is sometimes surprising how high a grade of heat can be not only tolerated but agreeably welcomed. A stone bottle filled with hot water may be placed under the pillow and the ear kept warm in this way for hours. A two to four grain solution of Atrop-sulph if dropped into the ear is often a valuable auxillary to the internally administered Bell. I have never seen any bad results follow its use in this way. Frequently the constant galvanic current will be found efficient in controlling the pain and in allaying the inflammation. The effect while immediate and gratifying seems, however, only to be temporary. My method of using it is to place the anode over the mastoid, the cathode in the hand of the opposite side. I seldom find it necessary to use more than four or six elements.

After pus or mucus has formed in the middle ear in quantities sufficient to change the curvature of the membrane, paracentesis is I think, almost always indicated. In this way the pain is relieved and the retained matter thus has an outlet. The healing process moreover progresses much more rapidly, and the destruction of tissue is much less after the clean instrumental incision than in those cases in which the purulent discharge has formed a ragged ulcerated perforation. The value of Bel., Puls., Ars., Merc., Apis., Capsicum, Lach., and later Hepar, and Silicia is too familiar to you to need more than passing mention. The indication for each, however, is much more simplified by an ocular examination of the condition of the membrana tympani.

An extension of the disease to the mastoid cells always presents a serious complication, and this may be brought about either by the rapid increase of the purulent inflammation or by an interposition of an obstacle to the exit of the ever forming pus. This obstacle is sometimes found in the resistance of the drum head—when paracentesis is required sometimes in foreign bodies in the external auditory canal, where their removal is necessary. The following case is interesting in exemplifying the fact that a simple cause may be sufficient to perpetuate the disease. A very similar case is cited by Moos, (Archives, Opt. and Otal., Vol. VII, p 465), in which a fatal issue might in all probability have been avoided, had a careful examination been made, and proper surgical measures taken:

Mrs. G., aet 30, was advised by her physician, Dr. D. B. Stumpf, to consult me, and she called at my office July 19, 1879. Patient had been suffering for a week with most agonizing pain referred to depths of right ear. Had repeated slight chills, loss of appetite, coated tongue, physical exhaustion, slight soreness of the throat, slight purulent discharge from the affected side, and hearing power on that side almost abolished. The auricle, posterior auricular region and external meatus were hot, stiff, and swollen. The integument over the mastoid was also very red and exquisitely sensative to pressure. No examination of the inner portion of the outer ear was possible much less of the membrana tympani because of the highly inflamed state of all of these tissues. The condition was so serious

that I deemed it advisible to operate without delay. A free incision extending to the bone was made about half an inch posterior to the auricle. A thick dark bloody discharge followed the knife, but no pus had as yet formed. The pain, however, continuing intense, a descending galvanic current caused immediate relief, the first experienced for a week. Poultice ordered for mostoid and frequent instillations of hot water into external meatus. Bell. and Puls. were given in low attenuations. Pain did not recur until four o'clock the next morning, when on visiting my office it was almost as severe as before. The external inflammation was somewhat diminished and discharge increased. An examination was now possible, and almost the entire calibre of the external auditory meatus was found occluded by mucous polypus. The slight discharge finding an outlet around its edges. The pedicle was attached to the canal about midway between the auricle and membrana tympani. With a Blake's Wild's polypus snare about half of the growth was immediately removed, and at subsequent sittings thoroughly cauterised with stick silver nitrate, the drum head was in a dull soggy condition, though no actual perforation was found. Constitutional conditions seeming to call for Puls. and Merc., these were used for a week or ten days. Within a week of patient's first visit the mastoid swelling had almost wholly vanished, and the incision healed, the purulent discharge was diminished, the drum head was brighter, and although it continued necessary to occasionally cauterize the remnant of the fungoid growth, the patient was in every other respect well, long before she was discharged cured, and with perfect hearing, nineteen days after her first visit.

A polypus was also found in the case referred to by Moos, but in this instance coming from a perforation in the membrana tympani. No way of exit for the pus being found through the outer ear, the mastoid cells became involved, and in them the purulent matter became inspissated, phlebitis and thrombosis of the right transverse sinus, as well as the right internal jugular with consequent metastatic infarction of the lungs resulted, with purulent pleuritis and pneumonia of the right side.

Citing the case Moos makes the obvious remark that had the pedicle been cut at a certain period, the life of the patient might have been saved. Since, however, this did not occur, it was natural that the inflammatory process through the constantly increasing accumulation of the secretion should finally pass to the tissue inside of the cranial cavity—in this instance the sinus lateralis—and bring the life of the patient to an end.

LXXXVII.

Use and Misuse of the Ear Syringe.

BY HENRY C. HOUGHTON, M. D.

We are ready to admit that medicine is not yet an exact science, and surgery would seem equally unstable if we note the fact that methods of procedure once deemed orthodox, are now condemned. The pet theory of yesterday becomes the exploded fallacy of to-morrow. In aural surgery no single instrument has been so often exhibited as the syringe. Let the disease be what it would, acute or chronic, suppuration or non-suppuration, clearly defined or obscure, painful or otherwise, the indication was "to syringe the ear." Now such teachings may have been admissible when the means of examination were limited to direct sunlight admitted to the meatus, only to be excluded the moment the eye of the surgeon reached the range desired; or at a later date when one took an oblique view through a glass globe filled with water. But at present, with instruments perfectly adapted to the purposes of illumination and exploration, we must not be satisfied with superficial examination, and ill-advised treatment.

The syringe has been used for the removal of purulent or muco-purulent secretion, from the external meatus in all cases, regardless of the character of the ulceration which gives rise to the discharge. Many of the most celebrated practitioners deprecate its use for this purpose, and claim, with good evidence to support the claim, that better results are gained by prohibiting the syringe, and removing the pus with cotton or charpie. Even if the syringe is used in any case characterized by excessive secretion, all moisture should be removed by similar application after the greater portion has been washed out with water. We may class ulcerations in two great divisions as regards the nature of the discharge. The first gives rise to a discharge of sanious nature. Repeated inspection of such an ulceration shows either a tendency to greater loss of tissue or a decided tendency to repair, careless use of the syringe causes mischief in either case. In the one it causes disintegration of tissue, and a sloughing which is excessive; in the other it prevents cicatrization by softening and removing the crusts which overlie ulcers or perforations. In the second class of ulcerations, above mentioned, the discharge is decidedly muco-purulent, free from blood and non-corrosive, inspection of the ulceration shows no tendency to either repair or sloughing, and no special change can be noticed from year to year. In this class the use of the syringe is not counter-indicated.

As evidence of the change which practice has undergone, we may notice the testimony of Dr. C. J. Blake, of Boston, Mass., quoted by Burnett, to the effect that the healing of perforations of the drum head is promoted by the use of disks of sized paper laid over the perforation. The disks support the edges of the perforation, stimulate the repair and at the same time protect the sensitive mucous membrane of the tympanum, and improve the hearing. This method excludes the use of the syringe. In the same line of evidence is the article by Dr. Burnett, in Am. Journal

of Otology, Vol. II., No. I., entitled, "Uninterrupted Wearing of Cotton Pellets as Artificial Drumheads." The purpose of the article is to show the superiority of Yeaisley cotton pellets over Toynbee's rubber disk, as a means of increasing the hearing distance. The first case cited by Dr. Burnett was that of an English girl aged 16, in whose person the cotton pellet was an important factor in closing a perforation of the right membrana tympani, and the second conclusion Dr. Burnett draws from the study of the case is this, "That while aiding the hearing, it (the cotton pellet) stimulated the closing of the perforation in the drum head." Some of our English writers are taking a similar view of excessive use of moist applications and their practice has been modified in this respect.

For more than five years my convictions have been settled upon the superiority of these methods, so much so that I would sooner trust an intelligent mother with the absorbent cotton to be used with an aural probe than have her use with equal care the syringe; and the proportion of cures has settled my convictions, once only theoretical.

Another instance of the use or misuse of the syringe is afforded in the matter of removal of foreign bodies from the meatus auditorius externus. Usually the first instrument resorted to in such cases, is some form of forceps scoop or probe, but the syringe is usually more safe and more prompt in its action. If the foreign body does not entirely occlude the meatus, or if a small opening can be seen between the body and the wall of the meatus, a forcible stream of water from the syringe will discharge it. In some instances careful manipulation with Buck's looped probes will move the body so that it will present at a more favorable angle and thus give passage to the water. The same is true concerning the use of the syringe in the removal of cerumen from the canal. Instances have come to notice in which physicians syringed the ear repeatedly and forcibly, and failed to remove the masses of cerumen. Inspection showed that the secretion was of so soft a nature that the direct stream only served to impact it more firmly in the inner third of the meatus, upon moving some portion of the mass with a blunt probe, the stream of water burrowed behind the mass and dislodged it. The same procedure in the removal of dried scales of cerumen or crusts of pus and blood overlying deep ulcerations in the walls of the meatus or on the drum head is effectual.

Rigid disciples of our early masters were wiser in prescribing carefully and prohibiting the syringe, than we have been in its excessive use, but they are open to criticism in not adding cleanliness to careful study of symptomatology. I have seen cases of ulceration cicatrize completely in a few days without a dose of medicine, by simply cleansing the parts daily with absorbent cotton, and this after months and even years of careful prescribing by better students of symptomatology than I am, or ever hope to be.

I cannot therefore be wrong when I urge the use of the means at our hands for the inspection of aural patients in order to reach a better knowledge of the diseases and a better advised treatment. The ethics of our profession demands it on the ground of our relations to our patients and the presence of the necessary instruments upon our tables will incite us to careful examination and intelligent treatment.

LXXXVIII.

Report of the Bureau of Climatology.

BY A. R. WRIGHT, M. D., Chairman.

[Submitted September, 1879.]

We propose that a committee of one be appointed by this Society in each city of the state to report from time to time on its water supply; also on any real or suspected bad effect the changes in the condition of said supply may have on the public health. For instance, it is known that in a lake or river supply, some kinds of algæ are often found. Though it is suspected that this algæ, especially in a decaying state, vitiates the water for potable purposes, the fact has not been positively established by experts. Prof. Lattemore, at the late meeting of microscopists at Buffalo, stated that by specimens of algæ from the water supplies of different cities, he could generally tell from what city the specimen came, certain species being peculiar to certain waters. Waters from rivers and sometimes from lakes vary with the season and the drought. Let us know the times and conditions unfavorable to health.

But the *well water* is the most prolific in pathological conditions, hence it is the more necessary that we should watch closely its effects on those who use it. It is now the general opinion of scientists that the use of well water in cities should be entirely abandoned and the wells closed. At the last meeting of the American Institute of Homœopathy, I entered fully into the reasons for this and gave good authority from investigating men and practical engineers of cities. It is not necessary to recapitulate. Well water is a dangerous element in cities and cannot be made safe under any circumstances. Such is the testimony. Outbreaks of fever from drinking polluted well water, such cases for example as have been carefully investigated and reported on by Dr. Vanderwarker, of Syracuse, Board of Health of Rochester, etc., are valuable lessons to us. It would not be necessary that this committee of one should himself take time from his busy hours to make the investigations necessary. He can write down the observations of reliable authority, such as analytical chemists. A compilation of these notes from different cities would give us a valuable record. In conclusion we recommend the following resolution: That this society appoint a committee of one from each city of the State, to report annually or oftener if required, to the Chairman of the Bureau of Climatology, the kind, condition and quality of the water supply of his city, and all the significant facts that he can gather on the sanitary effects of said supply.

Respectfully submitted,

A. R. WRIGHT, Chairman Bureau of Climatology.

REPORT FROM THE CITY OF HUDSON, BY T. T. CALKINS M. D., FOR 1880.

I am glad to see a growing interest manifested by physicians and Boards of Health upon this subject, as there is no question but they are a prolific source of zymotic diseases, particularly those of scarlet fever and diphtheria.

The city of Hudson, has, perhaps, as good sewerage as any in the State, situated on high ground, water passes rapidly through them, thus preventing an accumulation of filth.

We have a large filtering reservoir located on the hill, above the city, filled from the river by forcing pumps. Nearly all dwellings are supplied with this water, and after being used finds its way back through the sewers, thus materially aiding in keeping them well washed out. But by an oversight or carelessness of the plumber, has been brought about a very serious difficulty. By the introduction of water into our houses, we have connected them directly with the sewers, as a large proportion of the waste pipes to sinks are constructed without traps, which allows the sewer gas to enter directly into the dwellings, which of course is highly objectionable, and as I trust, will soon be obviated.

As to the deleterious effects of sewer gas as thus far manifested upon the community, I can say but very little adversely. The town has been usually remarkably free from malignant diseases. Some two years ago there were three deaths in one house from scarlet fever, which was caused without a doubt, from obstructed drainage on the premises.

There has prevailed this winter, almost universally a diarrhœa, which we have thus far been unable to satisfactorily account for. Some have thought it might be caused by the use of the river water, and I am quite inclined to think, that it is not as pure as in the summer, from the fact that it is confined beneath the ice and has no chance to become purified by the winds and the waves and tides.

REPORT OF NEWBURGH, N. Y., BY JNO. J. MITCHELL, FOR THE YEAR 1880.

In reporting of the water supply of this city, I can state that thus far I have not been able to trace any diseases as arising from its use. Flowing from a small lake about three miles from the city, it is conducted to it by an open conduit, and for some two miles of iron pipes. The lake is partly fed by springs, but mostly is surface water. The drought for two years has rendered the water very disagreeable at times, but not unhealthy. In the city proper, malarial diseases are rare and dysentery is nearly unknown. In consequence of the disagreeable smell and taste of the faucet water, the use of well water has been resumed in some localities, and has at times been followed by typhoid fever and dysentery. The death rate for the past year has been 18.2 per thousand. The sewer system is tolerably perfect, though as it has not been constructed as a whole, but part at a time, there are important parts in the older section of the city where it is defective. In one notable instance, where an old water course was utilized as a sewer, there were quite a large number of fatal cases of diphtheria, undoubtedly induced by the poisonous gases resulting therefrom.

LXXXIX.

Ventilation of Soil and Waste Pipes and Under-Drains.

BY H. M. PAINE, M. D.

THE GERM THEORY OF DISEASE.

There is no question with regard to the obscurity which shrouds the origin and development of many forms of severe and frequently fatal diseases. Exceedingly plausible theories have been promulgated, have survived brief practical tests, and have been substituted by others, even more evanescent. The one which, at the present time, gives promise of far greater practical utility than any hitherto advanced, is the *germ theory of disease.*

Many experiments are being conducted with a view of determining the sources of disease originating in, and in any way connected with, the ventilation and drainage of buildings. The question is one of very great importance. It involves the sanitary status of dwelling-houses, stores, offices, factories, and churches; in fact, of all habitable buildings. The air in but few dwelling-houses is free from contamination of greater or less intensity. One of the more frequent sources of impurity is found in imperfectly constructed soil and waste-pipes. This introduces the first division of the subject, that of the escape of noxious gases, which are lighter than common air.

VENTILATION OF SOIL AND WASTE PIPES—VENTILATION UPWARD.

The process consists of carrying the soil, or waste-pipe, upward to a point a few inches above the roof of the building.

This is one of those wise preventive measures, which experience has pointed out as the only safeguard in all cities, where the extensive and complex system of under-drainage becomes a constant and prolific source of contamination, by generating, confining, and concentrating within circumscribed limits, poisonous gases, which are highly prejudicial to health, and which, unless speedily rendered innoxious by freely blending with pure air, constitute the principal exciting cause of bilious, remittent, intermittent, and typhoid fevers, and, in fact, all diseases having a malarial origin. The object designed to be accomplished by the introduction of the ventilating tube is the escape upward of the noxious gases, which are always generated to a greater or less extent in the soil pipe; also gases, which are forced up into the soil pipe from the drains below. These gases form in some instances very rapidly, particularly when developed by the heat of the house, to which soil pipes are always more or less subjected. They become rarefied and highly elastic when heated, and, as they cannot expand downward on account of the denser, because cooler gases in the drains forming an effectual barrier in that direction, there is no escape for them, except by expansion upwards into the dwelling. This often occurs in closed soil pipes, when the water-closet is being used, causing agitation of the water in the trap.

The soil pipe is dwelling-houses is usually twenty or thirty feet in length, and portions of it are frequently so located near heater pipes or

chimneys, as to cause an elevation of the temperature of their contents far above that of the same gases in the pipes and drains under the ground. It is well known that the higher the temperature, the more rapid the process of decomposition; and the greater the accumulation of gases, the greater the pressure, and the larger the amount that escapes into the dwelling. It is also true that the presence of deleterious gases in a building cannot, in all cases, be detected by the odor. There may be sufficient concentration of nearly odorless gases in a dwelling to induce serious, and even fatal, disease in those who are specially susceptible to their influences. It is to be remembered, also, that the conditions of disease growing out of this form of impurity are not by any means equally intense, sometimes, scarcely distinguishable. Cases are constantly occurring in which persons, while able to attend to usual daily avocations, are yet sufferers from repeated attacks of debility, nervous prostration, bilious and gastric derangement. The only effectual method, by which this frequent source of contamination of the air in dwelling-houses may be removed, is, as previously stated, the carrying upward of the soil pipe, of a uniform size throughout, from the drain underground to a point a few inches above the roof of the building.

THE TRAP AN INSUFFICIENT PROTECTION.

Many persons suppose that entire immunity from the danger pointed out is secured, provided the trap under the water-closet is kept full of water. Undoubtedly, the water in the trap serves an excellent purpose, and is, in ordinary circumstances, essential to safety; it is found, however, that at times it is entirely inadequate.

The water in the trap is an insufficient protection. In the first place, when, by the sudden influx of a large volume of water, caused, it may be by a copious shower, the main drain or sewer is too small to carry off the accumulations with sufficient rapidity; or the lower end being entirely submerged, as very frequently happens at high water, when drains empty into rivers, or running streams, there is no escape for the foul gases in the drains, except backward and upward into the dwellings, through the crevices in the drains, or, if these are sufficiently tight, through the water in the traps.

In the second place, the trap becomes an inadequate protection, when on a sudden withdrawal of the large accumulations in the main drain, a partial vacuum is produced, often of sufficient force to draw the water by suction, out of all the traps for a long distance back from the outlet of the main sewer. When this occurs there is, for the time being, no barrier whatever to a free ingress of contaminated air into the dwelling-houses. These sources of danger are entirely obviated by extending the soil pipe of uniform size to the roof of the house.

THE ESCAPE OF GASES HEAVIER THAN ORDINARY AIR.—VENTILATION DOWNWARD.

There is, however, still another source of danger; for it is found, by observation, that the fowl air in drains and soil pipes is frequently *heavier* than ordinary air. When this occurs, and the drain and soil pipe are sufficiently tight to prevent egress, the accumulation gradually fills the pipe, and at length flows over into the house whenever the water-closet is

used. Danger from this source is greatly increased by the insertion of a trap in the drain outside of the house, and between it and the main sewer in the street. Nevertheless, such a trap should be always introduced. It prevents the ingress of both foul gases and vermin from the main drain. The remedy in this instance is easy of application. It is essentially the same as the first mentioned, viz., the insertion of a small ventilating tube into the drain outside of the house, and between it and the trap, and extending the pipe a few inches above the surface of the ground. To prevent liability to frequent closure of this tube it is usually bent over at the top. This lower venlilating tube serves a double purpose, that of allowing the free escape out of doors of any gases denser than common air; also a ready method of ascertaining, by means of a lighted taper, whether any stoppage in the drain or soil pipe has occured inside the building. The difference in the temperature inside and that outside the building is constantly changing, and necessarily creates currents, the movements of which can be easily determined.

THE BENEFIT OF THOROUGH VENTILATION.

The good offices of these two ventilating tubes are, therefore, plainly apparent. They allow a free circulation upward and downward, thereby relieving the pressure of heated and rarefied gases; also the overflow of denser ones; also preventing the drawing of the water out of the traps by suction; thus securing perfect immunity, if the connections between the joints of the pipes are tight, as they should be, from all atmospheric contaminations within the building. It is safe to assume that no dwelling without them, however costly and well-appointed in other respects, is a suitable place of residence.

ALL WASTE-PIPES REQUIRE VENTILATION.

It is an error to suppose that buildings in which there are no water-closets do not require the ventilation of the waste-pipes from the sinks. Several of the most obstinate cases of chronic jaundice, also cases of frequently repeated attacks of bilious colic that I ever witnessed were undoubtedly occasioned by the escape of sewer gases into houses having no adequate protection of the kind described.

DANGER FROM THE ESCAPE OF THE CONTENTS OF DRAINS INTO THE SOIL UNDERNEATH DWELLINGS.

While it is of the highest importance that soil pipes and drain-pipes within the building should be freely ventilated, it is also necessary that they should be so tightly joined as to at least prevent the exit of their fluid contents into the soil underneath the building, or at any point contiguous thereto. The escape of the fluids from imperfectly constructed drains into the soil underneath dwelling-houses soon completely saturates large portions of the surface earth, which, with or without the aid of the heat of furnaces or stoves in close proximity, generates an abundant supply of fowl gases. These rise through the crevices of the floors into the house, and very frequently become a frightful source of disease and death. The disease of which Prince Albert, of England, died, was typhoid fever, occasioned by the absorption into the loose soil underdeath his private library of foul gases which escaped from an old drain, a portion of which the laborers, while excavating for the foundation, left uncovered.

Many instances of serious and fatal diseases have come under my own observation, some of them during the past winter, not only in the tenement houses of the poor, where sources of contamination are almost unavoidable, but in the very best and most costly dwellings, in which every possible precaution against this very defect had been taken. Cases of severe, and very frequently fatal diseases, whose origin is directly traceable to this source, are constantly occuring in the practice of every physician.

THE MORE COMMON FORMS OF SEPTIC DISEASES.

Diseases which are produced by the inhalation of foul gases are called *filth diseases*. They are designated *zymotic* diseases, or those occasioned by a "ferment in the blood." They are sometimes very active, malignant, and rapidly fatal. They apparently produce, within the period of a very few days, an entire decomposition and destruction of the normal constituents of the blood. In other cases they act as disturbing influences through many months, or even years. These are the cases in which the parties suffer, sometimes intensely, while still able to attend the daily routine of labor. The more prominent features are chiefly: Mental depression; unrefreshing sleep at night, and sleepiness during the day; loss of will-power; inability, without great effort, to concentrate thought upon any subject; listlessness; loss of physical energy; headache; dizziness; feeling of fatigue; pain and soreness in every part of the body; coated tongue; foul breath; loss of appetite and craving for improper articles of food; and frequent paroxysms of feverishness and thirst. Sometimes the poison appears to seize upon the local mucous membrane of the throat and air passages, and then develop diphtheria, quinsy, and ulcerated sore throat. In others it acts more generally upon the system, and is manifested by the presence of boils, carbuncles, abscesses, or erysipelas. Sometimes it concentrates its influence upon the liver, causing a suppression of bile, producing a sallow complexion and jaundice; or a changed condition of the bile, resulting in constipation, or diarrhœa, or bilious colic. Again, in other instances the septic poison develops all the low grades of fevers, particulary spinal mengitis, bilious, gastric and typhoid fevers of a remittent or intermittent type.

LIABILITY TO DANGER FROM DRAINAGE INTO CESSPOOLS.

Without doubt a thorough system of under-drainage in cities is far preferable to drainage into cesspools, such as is frequently resorted to in the country and small towns. Drainage into cesspools, like the infiltration of sewage underdeath dwellings, frequently becomes a prolific source of disease. The soil, for a distance of many feet, becomes fully saturated, and then overflowing into the cellar of the house, or finding natural channels underground, passes readily into the well which supplies drinking-water for the household. Then, too, soils of an impervious structure, by preventing the absorption of the fluids, causes them to come to the surface, where the heat of the sun quickly engenders putrefaction and the formation of noxious gases. It is probable that "filth diseases," when they occur in the rural districts, in a large majority of cases are a result of local causes, having their origin in defective surface or cesspool drainage. Careful observation establishes the presumption that diphtheria is a "filth disease," and that its presence so frequently depends upon this germinal source

that, in all cases, it is safe to assume the presence of local septic origin. The unusual number of cases of diphtheria of a malignant type which have occurred during the past two or three years in the village of Amsterdam, and its vicinity, are very clearly traceable to this source. The soil in nearly the whole village is so very shallow that under-drainage is impossible. In other localities, like that of the village of Lansingburgh, where the soil is made up of coarse gravel, and the drainage is largely into cesspools, both diphtheria and typhoid fevers are of very frequent occurrence.

THOROUGH VENTILATION OF WASTE-PIPES AND DRAINS SECURES COMPARATIVE IMMUNITY FROM SEPTIC DISEASES.

It is unnecessary to add to the stock of undisputed facts in favor of the germinal origin of these septic diseases. So far as my observation has extended, I can emphatically state that I do not recollect having witnessed or treated a single case of typhoid fever within the past ten or fifteen years in any house in which there has not existed a defect, either in the ventilation of the soil pipe or in the imperfect construction of the under-drains.

DOUBT REGARDING THE NOXIOUS QUALITIES OF SEWER GASES.

There are many persons in every community who do not believe that sewage vapors are, to any considerable extent, prejudicial to health. They claim that far too great importance is attached to this subject, and that the series of proposed protective measures are expensive and unnecessary. They predicate their opinion on the well-known facts that many persons enjoy almost entire exemption from malarial diseases, while living, often to old age, in districts where the sources of contamination are abundant and constant the year round. They bring forward as conclusive argument, also, the statement that thousands of persons live many years, spending several hours daily in the sewers under the city of London, and with, it is claimed, far less than the average percentage of deaths, from septic diseases.

These statements, taken alone, are well calculated to throw doubt upon the theory of the power and extent of the pernicious influence of septic diseases; but, it is also to be considered, that they are, to a great extent, unreliable, as being too general in their application. It may be found, by a careful collation of all the facts and conditions involved, that the alleged comparative immunity from malarial or septic diseases is not as great as is claimed. It is probable that the supposed immunity is exceptional; also, that it merely affords an illustration of the ability of the human organism to resist disease-producing forces.

It is not, however, my purpose in preparing this paper to enter upon a critical or exhaustive examination and discussion of this important subject, or to attempt a reply to the argument advanced. While admitting that, in some cases, many facts appear to controvert the theory of septic contamination of sewage gases, we must also concede that in other circumstances and conditions the evidence in support of the disease-producing power of these gases is abundantly conclusive.

Without attempting to reconcile these two apparently conflicting conditions, we accept the fact of the actual presence of these deleterious

gases, and have endeavored in the foregoing statements to suggest such preventive measures as appear to be thoroughly effective, and at the same time easy of application.

ERROR REGARDING THE SOURCE WHENCE SEWER GASES ORIGINATE.

It is a common belief that the sewer gases in houses are, for the most part, generated in the large sewers or street drains, where they are supposed to accumulate, and, by expansion, are forced backward into the dwellings. Hence, many property owners, overlooking the principal source of danger, believe they and their tenants are afforded ample protection against the ingress of sewage effluvia by the insertion of a suitable trap in the drain leading to the street sewer.

GREATER DANGER FROM GASES FORMED IN WASTE AND SOIL PIPES WITHIN THE HOUSES THAN FROM THOSE GENERATED IN STREET SEWERS.

It is found by many sad experiences that a prolific source of danger arises from the putrefactive decomposition of matter deposited on the inner surface of the waste pipes within the house, a short piece, only a few feet in length, being frequently sufficient to contaminate the air in any ordinary dwelling.

The process of decomposition is greatly accelerated by the heat of the house. While, however, its formation cannot be entirely arrested, its accumulation and concentration can be effectually prevented, and its noxious properties neutralized and rendered comparatively harmless, by the admission and free circulation of outside air upward and downward through the pipes. The heat of the house in winter causes a rapid upward flow, and in summer, on account of the relative coolness of the inside of the house, the currents generally flow downward.

THE ONLY EFFECTIVE REMEDY—VENTILATION BOTH UPWARD AND DOWNWARD.

This combination of self-ventilating soil and drain pipes, illustrated by the accompanying diagram, constitutes as nearly complete protection as is possible against the formation and ingress of foul gases into dwellings.

An examination of waste pipes, after a few weeks' trial of this improved system of ventilation, shows previous accumulations to have been greatly reduced in quantity and changed into inert and harmless material.

HOW TO DETECT DEFECTIVE JOINTS IN THE SOIL PIPE OR DRAIN.

An effective method for ascertaining whether gases are escaping from any portion of the pipes or drains into the building is, the pouring into the soil pipe, at its highest inlet, an ounce or more of the Oil of Peppermint. If there are any defective joints, either above or below the surface, the odor of the oil will speedily reveal them.

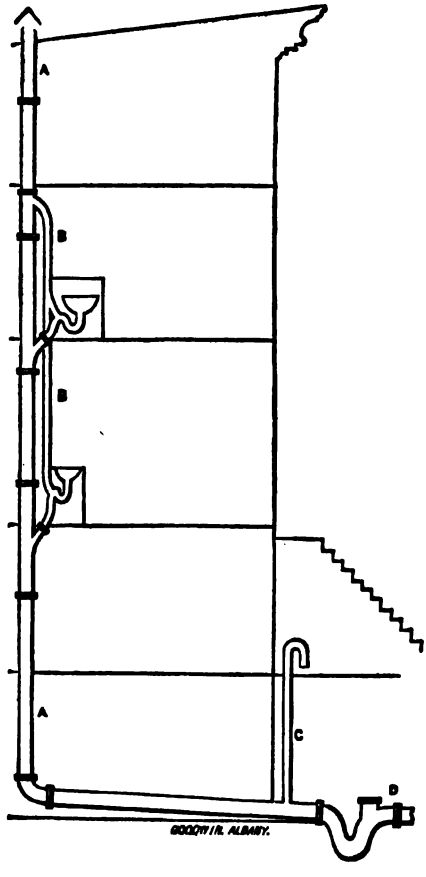
EXPLANATION OF THE DIAGRAM.

A. A. Self-ventilating soil pipe, passing, of uniform size, out above the roof, providing for free ventilation upward.

B. B. Air tubes connecting with the soil above the water-closet, to prevent drawing out of the water in the traps by suction.

C. Short ventilating tube outside of the house, opening a few inches above ground, to secure thorough ventilation of the soil pipe and drain downward.

D. Trap in the main drain outside of the house, and beyond the short-ventilating pipe, to prevent ingress of sewer gas from the street drain.



XC.

Should United States Laws be Enacted Making Vaccination Compulsory?

BY N. OSBORNE, M. D.

There can be no doubt in the mind of the medical profession that legislative enactments should be introduced, and sanctioned by Congress, making vaccination a compulsory *act*. Why this has so long been delayed, knowing and realizing as we do the great importance and necessity

of this measure, undoubtedly is owing to the fact that there has never been a united action on the part of the medical profession, urging its consummation.

While from the earliest period of our existence as a nation, our representatives in Congress have presented measures; and committees have been appointed to investigate epidemics which have visited our country at irregular intervals, looking to the better protection of her citizens, I know of no action ever having been taken, or any legislation proposed, compelling the masses to adopt general vaccination as a modifyer of that formidable and repulsive disease, "small-pox." As an entirety we are as a rule quite exempt from this loathsome disease, while many of the larger cities are scarcely ever free from isolated cases, and every few years some town or city is afflicted with this disease in its most malignant character. There are few physicians, I take it, who ignore the efficacy of vaccination. Each and all of us vaccinate our own families and those of our patrons, believing that when we do so, we better protect them from this disease. Yet how many hundreds, yea how many thousands, are living in the city of New York and in this State, who are unvaccinated, deprived through ignorance and poverty, of that protection afforded the more favored of its citizens.

If, then, we are believers in the efficacy of vaccination, would it not be human and consistent on our part as physicians, to urge the United States Government to forcibly protect those who are too ignorant or too poor to protect themselves. If our representatives in Congress hesitate not to appropriate money to investigate pestilential diseases of which we have *no* positive knowledge as to their cause, etc., etc., why should they hesitate to enact laws to prevent or modify a disease, where acknowledged means are known, but are not carried out for want of legislation in the matter.

Our members of Congress are sent to Washington to enact laws for the good of the people and for the people. And I verily believe that if physicians in each Congressional district, would unite in urging upon their respective representatives, the importance and necessity for a law to compel general vaccination, and a penalty for disobeying, I cannot but believe that within a very short time this much needed legislation would be an established fact.

Is it of more importance to know the cause and conditions necessary to produce the death of one thousand persons in New Orleans from yellow fever, than it is to enact and enforce a law which would save an equal number of lives in New York City from death by small-pox? In other words would, the citizens of the State of New York prefer to donate thousands of dollars every few years for the relief of those suffering from yellow fever in the south, a disease peculiarly incidental to warm climates and under certain atmospherical conditions, of which we have no established means of preventing, or would they prefer to use all honorable means to secure the enactment and enforcement of a law securing them comparative immunity from a disease equally as malignant and fatal, and of which, although we may not know positively its origin, we have and know of means which ameliorate and modify, so that it is comparatively a harmless disease?

As the supposed conservators of public health, I feel that we have too long neglected an important duty. That if ever a law is passed by Congress enforcing this important measure, it must emanate from the medical profession, and I must say that it would be particularly gratifying to me to see it emanate from the great State of New York. From the State Homœopathic Society, numbering as it does, many men of eminence and influence professionally and politically, men who are ever on the alert to introduce or maintain measures for the better protection of her citizens. Men who are ever ready to advance a step farther in promoting the best interests of humanity.

From what body of men could this measure more appropriately originate, standing as they have for years in solid phalanx, battling for a principle believed to be the only true one in existence which insures longevity.

These are the men who are best fitted to agitate and carry through successfully this important measure. Independent of the greater security to life, in a pecuniary point of view, it is very desirable. No less than fifty thousand dollars was expended by the city of Buffalo a few years since, in protecting its citizens from an epidemic of small-pox by means of general vaccination.

This amount does not nearly represent the financial loss to the city. People from the vicinity and surrounding towns, depending upon Buffalo for their supplies were forced to go elsewhere. So that, in fact, the previous amount stated was but a small portion of the loss sustained. What has occurred in Buffalo and New York City may occur elsewhere. Every village, town and city in the union is liable to this expensive experience from want of a general compulsory vaccination law.

As a nation we point with pride to our excellence in the arts and sciences, to our inventive and mechanical skill, to our development and prosperity. Let us not then surrender to any people or nation, a supremacy in affording protection to its citizens, by neglecting in securing enforced legislation for their better protection from disease.

Give us a United States law compelling every man, woman and child to be vaccinated, every new born child on or before arriving at a certain age, and in no case shall other than bovine virus be used. Until such a law becomes a law of our country, and strictly enforced, it must be admitted that physicians have proved recreant to the light and wisdom placed in their hands by a fortunate discovery, and for which they should be held responsible for the non application of its *beneficence to the human race.*

XCI.

Vaccination.

By John C. Morgan, M. D.

I will briefly state my observations under heads:

First—The *Virus*. The *bovine* is to be preferred for purity and exemption from syphilitic or other human dyscrasia. But often a general eruption appears and creates alarm, and also somewhat severe constitutional symptoms, which are but transient.

Second—The first or second remove of humanized Virus is milder and quite efficient. Syphilitic taint may be conveyed by it if *blood* constitute any portion of the material. It is *said* to be incommunicable otherwise, but this is an unsafe dependence.

Third—*Repeated humanization* through many years, finally produces inert Virus, as shown in the epidemic of 1872.

Fourth—*Virus of re-vaccination*. Spurious vaccination is non-protective and causes bad ulcerations, liable to be mistaken for, and to simulate syphilis.

Fifth—*Re-vaccination* produces a spurious crust, but is protective if the Virus used is good.

Sixth—*During an epidemic* vaccinations "take" with more certainty (from good Virus of course). Again, a previous vaccination therefore protective, often ceases to be so under the same circumstances. Hence, *re-vaccination should always* be promoted during epidemics.

Seventh—Drugs given before or during the incubation of vaccinia, if truly "similia" measurably antidote the vaccination, and may even frustrate it.

Eighth—Vaccination at the onset or in the course of varioloid, has seemed, in some cases, to promote malignancy. In others, good effects were claimed.

Ninth—In trituration, given internally, Vaccininum^{6} has proved its powers to modify and simplify variola. Variolinum^{30} has done likewise, but its continued use has been followed by aggravation.

Tenth—The best time for vaccination of infants is just after the mother's strength is fully regained.

Eleventh—The right arm should be preferred for first vaccination, leaving the left, (as being less used) for adult re-vaccination.

Twelfth—Linear, or crossed fine incisions, just to the rete Malpighi into which the softened Virus is rubbed, constitute the best method of vaccination. Thorough drying, without the use of plaster, is the best after management.

Thirteenth—Crusts do not *preserve their power with certainty* more than one week. When wet a few hours may suffice to cause putrefaction. A small quantity of pure glycerine retards this, and without preventing the proper effect of the operation. Virus should be kept dry in a refrigerator, and by no means in the pocket.

Fourteenth—During an epidemic, the udders of cattle are sometimes

found with pustules. Careless handling prematurely ruptures them and other vicissitudes coöperating, the crusts may prove quite inert.

FIFTEENTH—The largest and best sources of non-humanized Virus are found among the adherents of our own school, so far as I have learned.

SIXTEENTH—Inflammation often becomes severe in the course of vaccination. The all-sufficient remedy is the warm water dressing, applied constantly *around*, not *upon*, the pustule.

SEVENTEENTH—Chronic eruptions sometimes follow, owing to subjective dyscrasia being thus awakened. This corrected, is a prime step to cure.

XCII.

Dr. Baehr and Vaccination.

In his work on therapeutics, Dr. Baehr formally declares himself opposed to the practice of vaccination. In this, he does not stand alone. Many eminent physicians, in all countries, have also repudiated it. The question naturally arises whether the observations and statistics gathered under a wide variety of conditions, to prove its value, are to go for nothing, or whether the deductions of these undoubtedly wise men must be declared devoid of reason and destitute of common sense. As in many similar cases, the truth will probably be found between these extreme judgments.

It is now over 80 years since Jenner promulgated his discovery. It is safe to declare that the conviction in its favor, of a large majority of the profession, has strengthened rather than diminished in that time. But Dr. Baehr does not hesitate to assert his belief that "it is not possessed of the least prophylactic virtue against variola."

It must be admitted that the arguments which he advances in support of his belief, are somewhat meagre and unsatisfactory. He states in explanation, that "space is wanting to enable us to substantiate our views by corresponding arguments," but adds: "We shall have this privilege in due time, in a more appropriate place." Under such circumstances it would have been better for homœopathic literature, if the learned author *had* waited for sufficient "space" and a "more appropriate place," before hazarding so radical an opinion in opposition to "the general judgment of mankind." His work on therapeutics, in which his unnecessary and insufficiently sustained committal occurs, is a work of two volumes, and was intended as a standard authority and guide for the profession. It continues to be recommended as a text book by our colleges, and yet, in more than one place, it is marred by these hasty and ill-digested statements. It is nearly or quite a decade since its publication, but Americans have waited in vain, for his *conclusive* arguments in relation to the subject.

In the text referred to, Dr. Baehr asserts that the contagion "is the same in each of the three species of the small-pox disease, so that varicella may cause variola in one, and varioloid in another." But he fails to put forward any statistics, or even a single fact in support of his assertion. On the contrary, the statement stands opposed to the mature observations of the profession.

He adds: "If epidemic small,pox is so much more dangerous and extensive at the present time, than it was a hundred years ago, this can just as well be accounted for by the undeniable fact that epidemics gradually increase and decrease in intensity, as by the universally practiced process of vaccination." And again, "if persons who are not vaccinated, die at the present time, more frequently of variola, (God save the grammar), "die more frequently" than those who are, (sic!) the cause may be that, only those remain unvaccinated at the present time, who, living in the worst conditions of society, are more apt to fall victims to epidemic diseases." He continues: "The last epidemic among us, has shown very satisfactorily that the danger from small-pox is derived from accompanying local circumstances, not so much from the fact that vaccination had been neglected." "In the city of Hanover, where we have not had any malignant epidemics since the year 1846, we have had numerous small-pox cases for the last year, with only few deaths, whereas, more northward, in our marshy districts, where severe epidemics have prevailed during the last few years, small-pox has likewise claimed a larger number of victims in spite of vaccination." "We, therefore, have no hesitation in admitting that we belong to the number of those who repudiate vaccination."

Upon these loose statements and meager generalities, Dr. Baehr bases this strong committal. Without stopping to demonstrate their utter insufficiency, or to bring forward the facts which would prove his judgment hasty amd ill considered, the writer desires to submit a few suggestions which may show, after all, that there is perhaps a little philosophy, in the worthy Doctor's declaration.

In the light of present researches, the time is probably not far distant, when all morbid action will be referred either to molecular disturbance from known and unknown causes, or to specific germs and their resultant fermenting processes. Viewed from this standpoint, the theory of Dr. Baehr appears somewhat more consistent. There can be little doubt that variola and varioloid are propagated from an identical specific germ. Admitting this, the causes of varicella and of kine-pox, two very closely related maladies, may properly be referred to a *similar* source. In fact, we may come so near to Dr. Baehr's conclusion, as to admit that they are *varieties* of the variolous disease. In that case their germs would be similar but not necessarily identical, with that of small-pox or with those of each other.

On the contrary, the burden of proof, as derived from observation, is strongly opposed to germinal identity in these maladies, while it as strongly favors the view of such close similarity, as the zymotic action of any one of them, in the human system, is an effectual prophylactic against all others of the group. It is not necessary to contrast the phenomena of these diseases, in order to render this point more plain. The facts in

connection with them are familiar to all. If there is any doubt as to the protecting power of any one of them, it must be referred to varicella. But if we admit that Dr. Baehr would not so unqualifiedly assert its prophylactic influences, without ample authority from observation, it is still easier to concede its probable truth from the logical analogies involved. It is well established that, a majority of the major acute diseases exert, for a longer or shorter period, a protecting influence against further attacks.

This is owing to the fact that their specific germs have exhausted the conditions which caused their activity. Many analogies may be drawn from nature to support this statement. For example, the action of diastase in converting starch into glucose; that of tonula in turning solutions of glucose into Alcohol and that of the mycodermic aceti in transforming weak Alcoholic mixtures into acetic acid or vinegar. In all of these instances, where the conditions which permitted activity of the respective fungi are abolished, any additional fungus or germ of the same variety, will prove inoperative and of no effect.

Precisely similar results obtain in the system in the so-called zymotic diseases, and the number of diseases which ought to be so classified is as yet very imperfectly determined.

The deductions from this discussion are two-fold: First, that the diseases under consideration either have identical germs, or that they are so nearly akin, as that the active pre-occupation of any one of them will, for a time at least, bar the action of all others of the group; and second, that as kine-pox, when procured by virus direct from the cow, is a comparatively inoffensive malady, it is the duty of the profession to practice vaccination, rather than subject its patrons and the public to the risk of a visitation from the greater scourge of variola.

It may be suggested that this is inconsistent with the theory adopted, because of the universality of varicella in childhood. The objection is plausible but not conclusive, for, while it is conceded that the protecting influence of varicella is not, as yet, absolutely determined, it must also be admitted that the term of protection, from any of these maladies, has not been definitely ascertained, and that the problem can only be solved by an exposure to the greater evil of variola, or by practicing the lesser of *vaccination.*

XCIII.

Statistical Tables of Ward's Island Homœopathic Hospital.

BY A. P. WILLIAMSON, M. D.

TABLE SHOWING THE CONDITION OF PATIENTS DISCHARGED, 1879.

	Cured.			Improved.			Unimproved.		
MONTHS.	M.	F.	TOTAL.	M.	F.	TOTAL.	M.	F.	TO'L.
January	75	18	93	54	33	87	0	0	0
February	93	43	136	70	25	95	2	0	2
March	130	49	179	79	19	98	0	0	0
April	108	48	156	61	27	88	5	0	5
May	108	42	150	81	30	111	5	1	6
June	102	48	150	81	29	110	0	0	0
July	77	35	112	94	51	145	2	3	5
August	76	48	124	87	32	119	1	2	3
September	87	40	127	81	29	110	7	7	14
October	49	29	78	66	43	109	6	1	7
November	49	29	78	75	37	112	4	0	4
December	87	46	133	80	29	109	5	0	5
TOTAL	1041	475	1516	909	384	1293	37	14	51

RECAPITULATION.

Cured	1516
Improved	1293
Unimproved	51
Total	2860
Percentage of Cured	53.01
" " Improved	45.21
" " Not Improved	1.78

GENERAL STATEMENT, 1879, HOMŒOPATHIC HOSPITAL, WARDS ISLAND.

	MALES.	FM.	TOTAL.	N.	F.
Remaining Jan. 1st, 1879	213	89	302	113	189
Births	6	3	9	9	0
Admissions	2176	945	3121	836	2285
Total	2395	1037	3432	958	2474
Discharges	1987	873	2860	767	2093
Deaths	123	69	192	60	132
Total	2110	942	3052	827	2225
Remaining Dec. 31st, 1879	285	95	380	131	249

Whole number treated	3,432
Deaths	192
Rate per cent. of deaths	5.59

XCIV.

The Sphygmograph. What it tells us, and its value as an aid to the Diagnosis of Disease.

BY J. W. DOWLING, M. D.

It is announced in the programme that I will give an exemplification of the action of the Sphygmograph and discuss its value as an aid to the diagnosis of disease.

What do we mean by a sphygmograph? An instrument which will develop and record the minute peculiarities of the circulatory current. Of course we refer to the arterial side of the greater circulation.

I am far from being an enthusiast on the subject of the pulse (I refer to its minute peculiarities), although it is frequently a most valuable guide to the physician in forming his opinion as to the general condition of his patient, for its character certainly does indicate the condition of the great central organ, the heart, whether feeble or strong, and its action as regards rhythm.

It also indicates the quantity of blood sent with each systole of the left ventricle.

It also, which is very important, indicates the tone and tension of the elastic tissue composing the arterial walls, all of which are valuable guides as to the condition of the system at large.

Is this instrument a scientific toy, or can the arterial tracings be made of such service as to be a valuable aid to us in the diagnosis and treatment of disease?

In answering these questions, everything that can have any influence upon the circulation, must be thoroughly understood and carefully considered.

First the arterial pulsation with the heart and arterial walls, and everything influencing them, in a state of perfect health must be studied not only with the ordinary means, but by the aid of the tracings produced by this delicate instrument.

Not only must the tracings be taken at the wrist, but over the heart itself and over every prominent accessible artery in the various portions of the body. And as from positive observation, the tracings of the same individual vary at different periods of the day, at different periods of life, and under the many conditions of the system, (physiological) which are calculated to influence the circulation and the action of the heart, in order to understand departures from the healthy standard, it will be necessary

to familiarize ourselves with the tracings of health at these various periods and under these varying circumstances.

In an article such as this is intended to be, time will not permit us to go thoroughly into the consideration of the sphygmographic tracings of the heart itself and of the many accessible arteries of the body. Consequently we will confine ourselves to the radial artery, the pulse at the wrist, this having been for centuries the vessel whose pulsations have guided (or appeared to guide) the members of the medical profession in the diagnosis and prognosis of many diseases.

Long ago, when a student, I undertook, without the aid of the sphygmograph, to study the different pulses laid down in the book, some sixty-five different varieties, each in the estimation of *some one* indicating a different condition of the system.

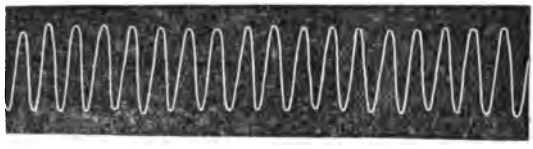
Aside from these forms, so familiar to all practitioners, such as the fast, slow, feeble, irregular, intermittent, compressible, etc., we find described by the old authors, the respiratory pulse, the sharp tailed or myurus pulse, the urinal, supposed to indicate an approaching evacuation of urine, the vermicular, supposed to indicate the movements of a worm in the intestinal canal, the hepatic pulse, etc., etc.

As a student, I carefully studied these from the books, and watched for an opportunity when I could with my own fingers, feel the delicate variations which would so plainly and in such unmistakable terms, tell of the wonderful changes going on in the system.

Nearly a quarter of a century has elapsed, and although I have constantly educated my sense of touch, I have thoroughly mastered and understand but about a baker's dozen of the sixty-five varieties.

Gladly did I hail the introduction of the sphygmograph into medicine, carefully have I studied it, much time have I devoted to taking tracings in health, at all ages, and in every disease where the circulatory organs seemed influenced either primarily or secondarily to any considerable extent, and the conclusion to which I have arrived is, that in organic diseases of the heart and of the blood vessels, the tracings which the sphygmograph affords us are *confirmatory* aids to diagnosis; that in diseases of the nervous system with their constantly varying influences upon the circulatory organs, these tracings can be of no special service in forming a positive diagnosis, although they will readily indicate certain derangements of the nervous system.

Four instruments have been introduced. First, that of Vierordt, which was calculated simply to mark "the extremes of dilatation, and the number of pulsations of the artery in a given time." It did not accurately indicate the character of the pulse.



TRACE OF THE RADIAL PULSE TAKEN WITH THE SPHYGMOGRAPH OF VIERORDT. FROM FLINT'S PHYSIOLOGY.

Then came the syhygmograph of Marey, which, although much more perfect than the instrument of Vierordt, registering, as it does, not only the extremes of dilatation of the artery, and the number of pulsations in a given time, but also the oscillations of the arterial walls, was objected to by some investigators on the ground, principally, that owing to the fact that in using the instrument it was necessary to bind it somewhat firmly to the wrist, thereby interfering with the return current of blood, rendering the arterial walls more tense from the overfilling of the vessels.

Then came the Marey's instrument improved by Edgar Holden, who has added to our medical literature a work containing some two hundred and fifty tracings taken under varying circumstances with the physiological or patholigical conditions under which each was taken.

The principal advantage of Holden's over Marey's lies in the fact that the bandages are dispensed with, the instrument being held immediately over the artery, between the thumb and finger of the operator.

The adjustment of the pulse spring, it is claimed, is less difficult, and the interference with the current and the natural emptying of the artery, which results from the bandages, is done away with.

The most recent and probably the most simple and accurate sphygmograph is that of Dr. E. A. Pond, of Rutland, Vermont, acknowledged by Dr. Holden himself to be superior to his own. This instrument has been so extensively advertised that it is probably familiar to all. It is with this that most of my own tracings have been taken.

I have asserted that in certain organic diseases of the heart and arteries the sphygmograph is a confirmatory aid to diagnosis. Merely confirmatory, for in my opinion, with the ear practiced and educated by long experience, the educated touch, and the known train of symptoms—we might almost say constant symptoms—accompanying certain organic diseases of the heart and blood vessels, we can, with the mechanical aids long in use, be almost positive in our diagnosis.

What does the sphygmographic tracing over an artery indicate?

It indicates the character of the pulse. "The minute peculiarities of the current of blood" through that particular artery, and what is really valuable, it records these peculiarities for future reference.

Now the question naturally arises, what influences this blood current?

We are all familiar with the fact that upon the systole of the healthy

heart the left ventricle, provided there is no arterial obstruction, sends its entire contents through the aortic orifice into the aorta. This action is so sudden, so violent as it were, that an impression is made not only upon the column of blood in the aorta itself, but upon the blood in the entire arterial system, down to the vessels of the smallest magnitude. A sudden impulse, a shock is imparted, and felt throughout the entire arterial system. So violent is this *shock wave* as it is called, or in sphygmographic parlance, this first event, that when one knee is placed over the other, the beating of the popliteal artery will produce a marked movement of the foot; and according to Flint, the idea of such an instrument as the sphygmograph was first suggested by this simple observation.

This shock wave sends the spring of the instrument upwards in almost a perfectly vertical direction, reaching the highest point which will be obtained during the pulsation. Then with the subsidence of this wave the spring falls, but not to the point of starting (except in extreme dicrotism) prior to the systole of the ventricle, but about one-third of the distance, when suddenly it is arrested in its downward progress, and then there is a second rebound of the walls of the vessel. This second rebound is the actual blood current, and is more or less marked, according to the quantity of blood propelled through the vessel. Probably the condition of the walls of the vessel influences the size of this event.

This blood wave or second event as it is called, is followed by a partial collapse of the vessel. The downward line produced by this partial collapse is called the third event of a tracing. This downward line is suddenly arrested in its progress by another wave producing a marked distension of the artery, and a consequent upward movement of the spring indicated on the tracing by a slight elevation.

This wave is generally supposed to be produced by the sudden closing of the semilunar valves at the aortic orifice. It is like the first impulse of a shock wave. The return current in the aorta, upon the diastole of the ventricle, coming with force against the valves, a sudden recoil takes place, which makes an impression upon the column of blood, and thence upon the elastic walls of the artery throughout the entire system of vessels.

Under certain circumstances this impulse is very marked, so much so that it can be distinctly felt by the finger. In such cases we have the double or dicrotic pulse which is frequently felt in typhoid and other adynamic fevers—in certain valvular disease of the heart, and conditions of general anæmia.

Following this impulse which is called the fourth event, comes the almost entire collapse of the artery, with, in rare instances oscillations of the vessel, indicated upon the tracing by slight waves, varying in number

and size. This ends the impulse which is succeeded again by the shock wave, indicating the systole of the ventricle.

The tracing described is the tracing of perfect health. The exceptional cases of dicrotism and oscillation are indicative of some pathological condition.

Below will be found tracings taken at four different periods of life. The first, second and third plate were taken from boys at about the age of puberty. Plate two from a lad of fifteen, well developed, in perfect health, to all appearances, although the rather marked decrotism would perhaps indicate to the contrary.

PLATE 2.

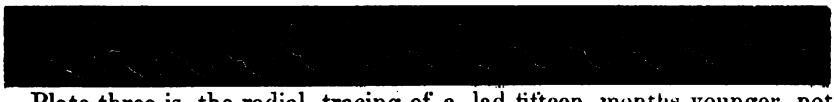
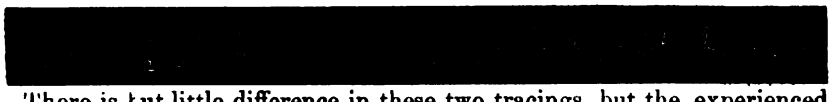


Plate three is the radial tracing of a lad fifteen months younger, not having as yet quite reached the age of puberty; in perfect health, well developed, and inclined to be stout.

PLATE 3.



There is but little difference in these two tracings, but the experienced eye will detect dicrotism well marked in the first, with a comparatively feeble blood wave. While in the second, the second event or blood wave is more prominent than in the first, and the dicrotic wave or fourth event, less prominent.

PLATE 4.

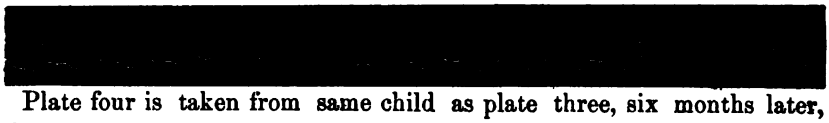


Plate four is taken from same child as plate three, six months later, when entering upon puberty, and after some three months of confinement in school. It will be noticed that the up stroke is more perpendicular than in the former tracing, and that from some cause, unknown, the fourth event or dicrotic wave is more prominent. This tracing was taken some two hours after a hearty meal, and possibly the digestive process may have had something to do with the prominence of the dicrotic wave. The boy seemed to be in perfect health.

PLATE 5.

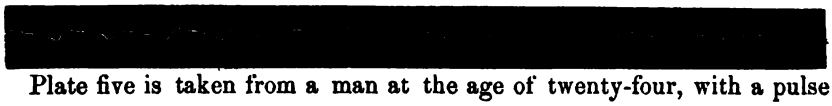


Plate five is taken from a man at the age of twenty-four, with a pulse beating at the rate of seventy-two to the minute, and in a perfect state of physical and mental health.

Plate six is from a lady of thirty-eight, in perfect health, of rather sedentary habits. It differs from the preceding tracings in the absence of a marked blood and dicrotic wave.

PLATE 6.

PLATE 7.

Plate seven is from a young man, a student of medicine, in most perfect health.

PLATE 8.

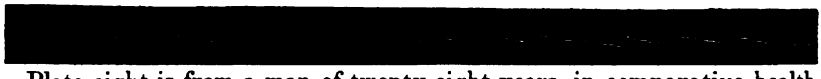
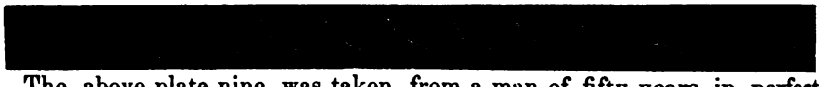


Plate eight is from a man of twenty-eight years, in comparative health, although not so vigorous as those from whom plates five and seven were taken.

PLATE 9.



The above plate nine was taken from a man of fifty years in perfect health. It will be noticed that the amplitude is greater than in the five preceding tracings, that the blood wave is well marked, and that the dicrotic wave is not at all prominent. The second impulse, owing to a movement of the wrist, is much higher than those which follow, if this irregularity was not owing to this accident, of course it would indicate serious disturbances in the circulation.

PLATE 10.

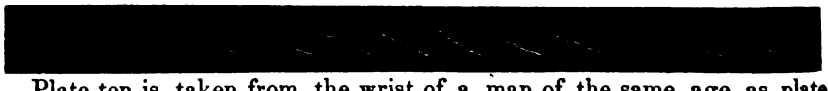


Plate ten is taken from the wrist of a man of the same age as plate nine, but much less vigorous, and inclined to derangement of the nervous system. In other respects healthy.

PLATE 11.

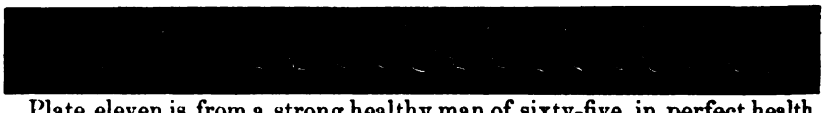


Plate eleven is from a strong healthy man of sixty-five, in perfect health, and accustomed to hard work. The irregularity is owing to difference in the amount of pressure.

PLATE 12.

Plate twelve is from an old lady of seventy-three years, suffering from no cardiac disease, but unable to exercise owing to chalky concretions in the joints, the result of gouty diathesis.

Here we have tracings taken at five or six different periods of life, from persons in perfect or comparatively good health. It is interesting to note the great differences in the amplitude of the shock wave, which seems to be highest at puberty, diminishing to forty, and then rising again, till at seventy it is quite as great as at the age of fifteen, marked departures from the above tracings would indicate departure from the health standard.

What is it that influences this blood current, and what conditions will change it from the normal pulsation described above to the endless variety which any investigator may obtain by examining a number of persons at different periods of life, at different periods of the day, and in different physiological and pathological states of the system?

The first question is readily answered by any student of physiology.

The second requires thought, study and constant practice with the instrument.

Nothing has been said with regard to the frequency of the heart's action, or of the pulse which is its index.

Although the instrument under consideration accurately records it, other means are more ready and quite as accurate.

We know that under purely physiological conditions the frequency of the pulse varies with the age of the individual, with the sex, with exercise and rest, with the position of the body, and with the temperature of the surrounding atmosphere. We also know that any impediment to respiration renders the action of the heart slow and labored.

The force and rhythm are what we are most interested in.

Physiologists tell us that there is an inherent irritabitity possessed by the heart which causes it to contract, and that its free and regular action is dependent upon the nourishment supplied to the organ itself by the coronary arteries, also upon the circulation of the blood through its cavities. That the action of the heart is influenced by the quantity and quality, and particularly by the density of the blood passing through it. And we are told that even after the irritability of the heart has become extinct, and it has ceased to contract, blood brought into contact with its lining membrane will restore its action.

We also know that the action of the heart is influenced by the nervous system, particularly the sympathetic, as evidenced by the effect of overloading the stomach, of fright, anger, grief, and emotions of various kinds.

A blow upon the epigastrium which is supposed to injure the solar

plexus, will, in some cases, instantly arrest the action of the heart, and cases are on record when death was the immediate result of such an injury.

We are all familiar with the influence of the pneumogastric nerves, as far as known, upon the action of the heart. "Section of these nerves in the neck, increasing the rapidity of its action, and rendering the pulsations more feeble. And galvanization arresting the heart's action."

Although the heart, in a large measure, influences the character of the pulse at the wrist—much is dependent upon the arteries themselves. We must remember that the arteries are largely composed of elastic tissue; that, under some circumstances, without regard to the quantity of blood contained, they are more tense than at others. That they are always rendered more tense, by an increased quantity of blood. We must remember that the smaller arteries are supplied with muscular fibres, so that at times they are more contracted than at others. Consequently the blood has a more ready exit at one time than at another, leaving the larger arteries fuller, or more empty as the case may be. We must remember that these muscular fibres are under the control of the vaso-motor nerves, and that these nerves are influenced by a great variety of causes.

Taking the normal tracing as an example, we have seen that the first event is an index.

FIRST.—To the force with which the blood is sent into the aorta.

In *simple* hypertrophy of the left ventricle, which arises in many instances from plethora, from nervous excitement with consequent over action of the heart, from the frequent lifting of heavy weights, from violent and long continued bodily exercise, etc.,—all tending *not to enlarge the cavity*, but to increase the thickness of its muscular walls—the arteries would naturally be well filled with blood, and the tension of their elastic walls consequently much greater than if the vessels were less distended, the result would be that this shock wave would be well marked, prominent and almost perpendicular.

Now, suppose the same condition of the arteries existed from another cause—obstruction to the escape of blood into the venous circulation through the arteries of smallest size, owing to contraction of their muscular fibres—or through the capillaries, owing to increased and unnatural density of the blood—with *an absence* of hypertrophy, and a feeble action of the heart. This first event or shock wave would be necessarily less prominent.

In another case suppose the vessels to be but partially filled with blood, and compressible, their walls consequently relaxed. This shock wave, unless the pressure upon the artery were great, would be very prominent, but less perpendicular, and the sphygmographic tracing would be corre-

spondingly large, but owing to the partially filled condition of the vessel, the collapse, the downward movement of the pulse spring, would be sudden and great.

So we see this shock wave can be influenced by the condition of the heart, by the state of the muscular fibres of the small arteries, whether relaxed or in a state of contraction—owing to the influence of the vasomotor nerves. By the density or anæmic condition of the blood, and also by the quantity of fluid contained in the vessel. This first event of the tracing, influenced as it is by so many different causes, is, therefore, *by itself* of no great value as a guide to the diagnosis of *special* diseases either of the heart or of the nervous system.

Of far greater significance the systolic is or true blood wave, or the second event in a tracing—for as before stated—this event or wave is an indication of the *quantity* of blood thrown into the artery under examination, provided there is no obstruction to its escape into the venous circulation. Although I should hesitate about deciding as to the existence of a valvular disease of the heart, by the character of this wave alone, if I were in doubt as to the presence of a murmur, owing to thickness of tissue over the præcordial region, or from other causes which might interfere with my accurately studying the heart sounds in a particular case, the sudden collapse of the first wave, with almost a total absence of this second event or blood wave, would prompt me to examine the case most carefully, for I should suspect, particularly if the patient suffered from shortness of breath, the existence of mitral disease. If the wave were *prominent*, it would, in my mind, exclude this condition, and be an evidence of free circulation of a good quantity of blood through the vessel. I should look upon the character of this wave as valuable confirmatory evidence of the existence or non-existence of certain forms of valvular disease.

But even here I might be in error, for in insufficiency of the aortic valves—with compensating hypertrophy of the left ventricle—the wave would be quite as prominent as in perfect health. But the moment the compensation began to fail, that moment the blood wave would become small, while the shock wave might be quite prominent.

I can imagine a case of rapid pulsation of the heart with feeble action, dependent upon purely nervous conditions, when the left ventricle failed to empty its entire contents into the aorta, in which this systolic or blood wave or second event of a tracing would be entirely wanting or so blended into the shock wave or first event as to be imperceptible.

The third event of a tracing, the downward line from the prominence produced by the systolic wave to the prominence produced by the wave of recoil, indicates the freedom, or difficulty with which the artery is emptied of its contents. If there is an obstruction in the capillaries, owing to con-

traction of their walls, or owing to a dense state of the blood, which prevents its free passage through these minute vessels, this line of collapse will be more horizontal than if the capillaries be relaxed, or the blood passing through them be anæmic, under which circumstances the line will be nearly perpendicular. As before remarked, the wave of recoil is prominent or wanting, according to the relaxed or tense state of the vessel, owing to causes already mentioned. As we have already stated, this dicrotic wave or fourth event, as it is called, is exceedingly prominent in some cases of typhoid and other adynamic fevers.

During the period elapsing between this dicrotic wave, and the next systolic impulse, the line generally descends, the ventricle being at rest and gradually filling with blood. This diastole of the ventricle actually commences at the close of the third event, before the dicrotic wave makes its appearance.

In the use of the sphygmograph much depends upon the amount of pressure brought to bear.

Dr. Holden contends that by the aid of the spring attachment to his improved instrument, the amount of pressure can be graduated to a certainty. This may be true, but, in the use of the sphygmograph no rule can be laid down which will apply to every case.

In some the tissues covering the artery are so thick that it is with the greatest difficulty, no matter how much pressure is used, that a tracing of any kind can be taken. In other cases the vessel is so compressible, and the tissues covering it so thin, and the action of the heart so feeble, that with the least possible pressure, it is equally difficult to secure an accurate tracing. I have on many occasions, at the same sitting, taken tracings from the radial artery of a patient, entirely unlike in appearance, although the expert would recognize a similarity between them.

Taking this fact into consideration, and the fact that so many and such varied influences change the character of the pulse, and that almost identical tracings can be developed in entirely dissimilar pathological conditions, we are led to the conclusion that sphygmography can never reach such a state of exactness as to be deserving of the title of a science.

The only tracing which approximates to a constant one, is the tracing of perfect health. Even then the ages of the respective subjects must correspond. In serious nervous conditions, we can readily see by the tracings that something is wrong with the circulation. But what produces this departure from the healthy standard, in a very large majority of the cases (from the tracing alone) it is utterly impossible to say.

I am inclined to believe that, although as was before remarked, it is a confirmatory aid to diagnosis, all that can be learned by the aid of this

instrument that is of value, can be as well learned by the skillful physician by other means.

I would not have it thought that I underestimate its value as an aid to diagnosis. On many occasions it has been of great service to me, not in deciding my diagnosis, but in prompting me to make a second or possibly a third examination, endeavoring, perhaps, to discover a murmur where I had failed to find one.

On more than one occasion, I have succeeded, and thus a case has been made clear to me which previously had been very obscure. The following case will illustrate:

Mr. H. O. C., was sent to me for a physical examination, and a diagnosis.

He was a large stout man of 55 years, height five feet eleven inches, weight about 220 pounds. Had always been subject to bronchial catarrh from the slightest cold. Six years ago had an attack of inflammatory rheumatism which lasted for five weeks. Since that time had complained of sinking sensation in the epigastrium, shortness of breath upon going up stairs, or upon taking any violent exercise. Has had a short cough, with mucous expectoration, principally in the morning, appetite good, bowels regular, sleeps well, but is worried about this shortness of breath, which, at times, is the cause of great inconvenience.

Physical examination showed a beautifully rounded chest and abdomen, covered with a thick layer of adipose issue, abdomen very prominent. But little movement of the ribs upon inspiration. Respiration apparently being performed principally with the diaphragm.

A chest expansion of but one and one-half inches, a vital capacity of but 130 cubic inches, when it should have been at least 240.

By palpation or mensuration I was unable to locate the apex of the heart, owing to the thickness of the chest walls, and to the feeble action of the heart. Upon percussion, I found normal resonance in the supra and infra clavicular regions, and in the upper portions of the chest posteriorly, but dullness anteriorly and posteriorly in the lower lobes.

The cardiac dullness extended to the nipple line on the left side. Hepatic dullness normal. Abdomen tympanitic evidently largely distended with gas. Upon auscultation, I got vesicular breathing in all portions of the chest where it is found in health, but of a remarkably feeble character, and almost entirely suppressed in the lower lobes.

I fully expected to find a cardiac murmur, but utterly failed. What I could distinguish of the heart sounds seemed pure. The apical impulse seemed to be in the fifth inter-costal space a little to the left of the nipple line.

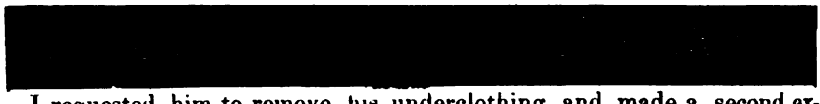
The second sound of the heart at the pulmonary orifice was much more

intense than at the aortic. Pulse feeble and compressible but regular. An examination of the urine showed traces of albumen, and upon microscopical examination granular and hyaline casts were found.

My diagnosis was uncertain. The missing link, a regurgitating mitral murmur was wanting.

In the absence of rales I was at a loss to account for the evident lung engorgement. On the following day I took a sphygmographic tracing of the pulse, at the radial artery. The dicrotic tracing which I here present was so remarbable that I was satisfied, in my own mind, of the existence of valvular disease.

PLATE 13.



I requested him to remove his underclothing, and made a second examination, at this time—owing to his having walked from his hotel to my house—the heart was beating more violently, and I discovered a blowing murmur, heard most distinctly at the apex, and with the first sound of the heart. My case was complete, and I had no difficulty in accounting for all his symptoms, and the pathological changes which I had discovered.

Here the sphygmograph was of service, not in guiding me as to my diagnosis, but in prompting me to make a thorough examination, which resulted in my finding the murmur which made the diagnosis perfectly clear.

I would not have it thought that I underestimate the value of the sphygmograph in physiological investigations. The instrument under such circumstances has been of undoubted value; and I am satisfied too that in the proving of drugs upon the *perfectly healthy*, if accurate tracings were taken, and a dictionary of these tracings compiled, the sphygmograph could be made of material service in selecting the proper remedy *when there was an absence of organic disease of the heart or arteries.*

XCV.

On the Performance of Percussion.

BY WALTER Y. COWL, M. D.

OF ALL THE ADVANCES in physical diagnosis which have been made since the discovery of the art, the most important is undoubtedly the discovery of mediate percussion by Piorry, of France, and its substitution for the old or immediate method, in the early part of this century—a

change which at once enabled many obscure physical signs of disease to be distinctly defined, and rendered them of immensely greater value to the practicing physician.

The actual worth of any diagnostic sign obviously depends upon the ability to distinguish it with ease and certainty from all others; this, with regard to any but the most pronounced, cannot be done by immediate percussion—by direct blows upon the body of the patient.

A discovery, like that of mediate percussion, which at once cleared up a vast field in the physical diagnosis of diseases of the chest and abdomen, becomes of immense importance to clinical medicine; but on one condition, viz., that it comes into general use. Is that condition fulfilled, however? Is percussion in frequent use by practitioners in general? Is it uniformly employed and relied upon by medical men in cases of thoracic and abdominal disease?

I think everyone will agree to the statement, that, as a rule, the general practitioner does not frequently employ or rely upon percussion as an important means of diagnosis. To anyone who is in the habit of employing and trusting it, this will seem a serious loss,—a loss to practical medicine, moreover, which we should make a constant effort to diminish.

The present paper simply hopes to be a contribution to that end, by striking at one great cause of this neglect, viz., the present difficulty of acquiring the art of percussion except at the hands of a master. This difficulty, we believe, can be so far diminished by the employment of a form of hammer which is in extended use in Germany, that the performance of percussion may become quite as easy as auscultation.

The other great cause for the lack of employment of percussion by the profession in general, is the fact doubtless, that, until recent years, the art of physical diagnosis has not been taught at our medical schools. The act of percussion seems so simple, however, that few medical men, whether trained or not in its use, will refuse to percuss when called upon to do so; yet a very large number by their very first stroke will show their practical deficiency—a fact quite forcibly indicated by Flint.*

"It is generally easy to know at a glance by the mode in which percussion is made, whether it be resorted to in order to develop physical signs with the import of which the practitioner is practically familiar, or whether it be employed merely for forms' sake or to affect an acquaintance with the subject."

As the mere pounding with the fingers appears to be so simple a matter that no special practice seems called for, poor results upon percussion are apt to be attributed to a lack of discriminating power on the part of the ear, rather than to a deficiency in the manual part of percussion. This undoubtedly leads, with many, to an infrequent recourse to this method of exploration, and renders many diagnoses uncertain or erroneous that might be positive. From unfamiliarity with its performance also, the results when employed will be uncertain.

As the number of signs to be obtained upon auscultation and the difficulty of distinguishing between them is as great, or greater than with percussion, we must attribute the less frequent recourse to the latter to

*Phys. Explor. Chest, p. 78.

the difficulty of obtaining its signs, rather than to difficulty of discrimination.

It may be stated as a general truth, that if we percuss well, we will very soon learn the physical characteristics of the three fundamental sounds to be obtained upon percussion; but if we do not percuss well, discrimination between them and their combinations will be difficult and uncertain.

It is a fact, often verified, that a student can learn the simple art of percussing with his fingers in one lesson. It is also a fact that all his teacher need do, is to *tell* him how to place and how to use his hands and fingers; the personal example of the teacher, although a quicker means of instruction, is not necessary in order to teach one how to bring out true and uniform sounds.

There lies no great inherent difficulty in acquiring the power to properly percuss; anyone with ordinary dexterity, we may say, can easily acquire the correct use of the fingers by half an hour's practice, if he closely follow the rules indicated in any of the prominent works on the subject of diagnosis.

These rules are few and may be briefly stated:

FIRST—Employ a free, swinging, wrist motion with little or no movement at the elbow.

This rule is absolutely necessary to follow, in order to obtain results in any degree positive or uniform, and by uniform results are meant uniform sounds upon striking any one spot. Nothing is so confusing, and nothing is so frequent with beginners, or others unskilled in percussion, as to get two different notes at the same point. It is the wrist motion which gives the delicacy and precision to percussion as to other similar manual exercises such as piano-playing, for instance.

SECOND—Strike with the very ends of the fingers.

It is the non-observance of this and the preceding rule that brings the lack of positive results which has mainly rendered percussion so much less employed than auscultation, by those who have not had the advantage of being personally instructed in these particulars.

The more frequent recourse to auscultation than to percussion in general practice, may also be due to the trouble of having patients remove their garments, although anyone well versed in either branch of physical exploration will seldom, if ever, examine over more than a thin undershirt.

Beginners in percussion almost invariably strike with the pulps of the fingers. The wrist is held stiffly, and the blow is delivered from the elbow. *A priori*, a blow struck in this way would seem to be more forcible than one delivered merely from the wrist. A comparison, however, of the two methods upon the chest or any other resounding body, as a thin door panel, will abundantly demonstrate the immense superiority of the latter method, both as to loudness and clearness of resonance. The former method is incapable of results in any degree positive, and moreover is very tiresome.

THIRD—To hold the finger receiving the stroke evenly in contact with the surface, and more or less firmly thereon, according to the depth of tissue which it is wished to examine.

*Medical Diagnosis, p. 208.

Da Costa states* that there is no more frequent mistake in percussing, than not holding the finger uniformly in contact with the chest wall, whereby the sound of the finger instead of the lung is obtained.

FOURTH—Let the stroke be like that of a spring hammer, which rebounds as soon as it strikes.

Holding the fingers of the two hands in contact will shorten and deaden the sound, destroying the resonance to a greater or lesser extent.

FIFTH.—Become ambidextrous! Learn to percuss equally well with both hands.

This ability is quite indispensable in properly comparing the resonance of the two sides of the chest at the outer ends of the infra-clavicular spaces, which it is so important to carefully examine, in cases suspected of phthisis. If but one hand is used to percuss with, the fingers receiving the blow must be placed across the ribs on one side of the chest, which they lie properly parallel with on the other.

SIXTH—Percuss lightly except when bringing out sounds before a class, or when examining the deeper portions of the lung.

Attention to this will help to secure the two things upon which uniformity of percussion note depends, viz., the striking of the same point with the same force at each successive blow, and upon the uniformity of the percussion note depends the clearness of perception of its particular character, either absolute or comparative, and therefore its diagnostic value.

The more forcible the percussion, the less is the hand under control. It is an axiom in percussion as in carpentry, that the moderate blows are the ones that hit the nail always squarely on the head. Blows on even slightly different parts of the stroke-receiving finger, will give different qualities of resonance. Strokes varying in force will also yield sounds differing more or less in character.

SEVENTH—Percuss with three fingers held together with their ends in line; by following this rule greater ease and uniformity of stroke will be secured.

The centre of gravity of the hammer (the hand) will thus come in line with the centre of the fulcrum (the wrist) and the centre of the striking surface (the end of the middle finger.) This, as well as holding the three fingers closely together, gives steadiness to the hand and precision to the stroke.

If there be any one thing which, more than another, is characteristic of unskilled percussion, it is hitting different parts of the finger or pleximeter at successive strokes, and obtaining consequently, a varying and uncertain sound, the value of which is little or nothing.

For very delicate percussion, especially in defining small cavities, etc., the use of the middle or forefinger alone is preferable to three fingers, although not so facile or resonance-giving a method.

Attention to these seven simple rules—a free wrist motion, percussion with the ends of the fingers, even application of the stroke-receiving finger, a rebounding blow, ambidexterity, light or moderately forcible percussion, and the use of three fingers as one—will, with but little practice, render one sufficiently familiar with the manual part of percussion, to intelligently learn and make use of, the various sounds brought out·

There seems to be no excuse for anyone at all conversant with the prime importance of percussion in differential diagnosis. in not making an effort to acquire the skill requisite for its intelligent employment. Nevertheless, we cannot forget the fact already mentioned, that skillful percussion is not general, that it is not employed or relied upon, five times in ten, where it ought to be.

What is the remedy for this? Evidently, to diffuse a knowledge of the rules of percussion; but this, by text-books, such as Da Costa on Diagnosis, has already, we may say, been thoroughly done. Is there any other remedy? Does the use of the hammar furnish one?

It may have been noticed that no mention has thus far been made of percussion hammers, and for two reasons; first, because *all* American authorities now agree in recommending the fingers,* and secondly for the reason that the form of hammer, which has been in use in this country, is quite inferior to the finger as a means of percussion—a fact apparent to anyone upon hearing the sounds brought out by both means successively, and practically evident to all who have thoroughly learned the proper use of the fingers.

Hospital *internes*, who have large numbers of chest cases to treat, almost invariably forsake the hammer for the fingers soon after their service begins. The idea that a louder sound can be brought out with the hammer than with the fingers is a mistaken one, which the writer, in common with others, long since discarded, after comparison of the results obtained by advocates of the two methods (for the class room) in demonstrations at the Bellevue Hospital amphitheatre.

In the act of percussing, the fingers strike with three points, the hammer with but one; a greater volume of sound, for the same amount of force used, is, necessarily produced by the fingers—a fact easily verified by experiment.

The defects of the common form of percussion hammer are, a lack of weight and too great an elasticity in the head of the instrument, whereby uniformity and precision of stroke are rendered fully as difficult to obtain as with the fingers.

The sounds produced are higher in pitch than those brought out by the fingers or a heavier headed hammer, which renders the differentiation between dullness (high-pitched) and normal pulmonary resonance less easy. There is also more extraneous sound produced by the contact of the hammer with the pleximeter than by the impact of the fingers upon the cushioned dorsum of the middle digit.

The handle is not well balanced. Being also quite small and round, instead of broad and flat, it is not so easily nor so firmly held. This defect of shape makes it very liable to turn in the hand and give an oblique and uncertain stroke.

The finger will yield better results, costs nothing, and in more senses than one, is much handier than the ordinary hammer.

The same remark applies to the use of an artificial pleximeter with even greater force. It is much inferior to the finger as a stroke-receiver.

*Profs. Flint and Da Costa, while advocating the use of the hammer on certain occasions, as where many cases are to be examined at one time, agree in recommending the fingers for all ordinary purposes.

Beside its inapplicability to a chest in any degree emaciated, it gives a sound of its own on being struck that tends more or less to obscure the resonance of the lung, while the finger, being both dense and firm enough to transmit the force of the blow and vibrate in unison with the lung, gives no appreciable sound of its own, because of the elasticity of its integuments.

The comparative advantages of the latter are well summed up by Flint* in saying that "the finger as a pleximeter is superior in many respects to any artificial instruments, in size and form, and for application over and between the ribs. The force of application can be easily graduated. The operation is less formidable to patients. It affords information as respects the sense of resistance, which is a point of considerable importance. It costs nothing, and, in the most literal sense, is always on hand. The only disadvantage attending it is a liability to suffer injury if in constant use"—a thing which, in those subject to injury is generally avoidable by using light or moderately forcible percussion.

The pleximeter being larger and wider than the finger necessarily yields a resonance from a larger portion of lung surface, and is thus more likely to overlie and produce resonance from both healthy and diseased tissue. A mixed and confused sound rather than a pure and distinctive resonance is therefore apt to result.

Having detailed the points of inferiority of the artificial pleximeter and of the common form of percussion hammer, the previous question recurs to us. How may we lessen the difficulties of percussion, small as they may really be, so that its intelligent use may become more extended? Is there any method of rendering the act an easier one without sacrificing the value of its results?

From a repeated trial during the past year of the original form of percussion hammer invented by Winterich, of Germany, in 1841, and from a frequent comparison of its results with those obtained by the finger alone, the writer, although previously convinced of the inferiority of instrumental aids to percussion, has been led to believe that it is fully as good, and in some cases better as a percussor than the fingers, while its use is to be acquired with *much greater ease and rapidity* than that of the fingers, by those beginning percussion.

Having a thoroughly scientific construction, it combines an ease and accuracy of manipulation unattainable without constant practice by the other method.

Owing, also, to the greater delicacy of the blows required to bring out a good percussion note, the hammer can generally be used with the fingers as a pleximeter. If the digit be too tender, however, or if many successive examinations are to be made, a shortened and very narrow pleximeter may be used, and for this purpose the instrument is best made of metal with beveled edges on the under side and covered on the other with a piece of buckskin gummed to the surface.

Before describing the German form of hammer, it may be remarked that it is not held out so much as being a complete substitute for the fingers as an inducement for the practical acquisition of the art of percussion.

*Phys. Explor. Chest., p. 77.

But agreeing with all authorities that every one should learn to percuss with his fingers, and that they are entirely sufficient for the purpose, it may be asked: What is the need of acquiring the use of the hammer; and is it not apt to render one less proficient with either method, if both are to be acquired? Will not the general difference between the sounds obtained by the hammer and those produced by the finger, render one less acutely sensible to slight differences in the normal or abnormal percussion note, when employing either method? In fact, will not one method confuse the other?

At first view, the answer to this question would appear to be affirmative. Practically, we believe that it is not.

The general difference between the percussion notes produced by the finger and those brought out by the hammer, is of the same kind and not as great as that between the sounds produced respectively over thinner and thicker layers of adipose or muscle, a point in which, it is needless to say, chests widely differ.

'Tis not, in any case, the absolute variation of the percussion note from a certain typical standard (if there be any one such standard) by far so much as it is the *relative* differences between separate portions of the organs examined, which, as a fact, will, at one point or another, furnish their own standard of normality.

In practice, we find the difference in this respect between the hammer and the fingers in no degree embarrassing—a thing we unfortunately can not say of the great variations in muscle and adipose.

It is also our belief that a knowledge of percussion with the hammer will, from the practical knowledge of the necessary rules thus acquired, lead to the more frequent acquisition of skillful percussion with the fingers.

We may now pass to the consideration of the Winterich hammer as a mechanism, and its comparison with the hand in this respect.

The fundamental requisites of a good percussor are, a free, short, swinging motion, a large preponderance of weight at the striking extremity, or the closest possible approximation of the centre of gravity to the distal end, and a striking surface, which is both firm and slightly elastic.

The instrument of Winterich is a cylindrical iron hammer with a perfectly flat, thin, ebony handle, whose plane is coincident with the axis of the head. A hollow cap screws to the head, and is fitted with a small round piece of vulcanized rubber, of the consistency of an ordinary eraser, flattened on its face, which projects but slightly from the end of the cap. The instrument may weigh from two to two and a half ounces.

It will be seen that the hammer has a comparatively heavy head and a light handle. This enables one to give a sufficiently forcible blow with but slight effort. The percussion strokes, therefore, are much more apt to be uniform in force and precise as to point struck, in obedience to the physiological rule, that motions of small force are more easily made regular than powerful ones. It is a practical fact, moreover, that the heavier the head, the more uniform the strokes of the hammar can be made, both as respects the force of the blow and the hitting of one and the same spot.

The lack of a great preponderance of weight at the striking end, or the removed position of the centre of gravity from the distal extremity, is the disadvantage of the hand as a percussor—a disadvantage, however, which can be somewhat overcome by holding the fingers more or less at right angles with the plane of the body of the hand, and thus, at the same time, putting their weight in the striking line and approximating the centre of gravity to that line. But in whatever way the hand is held in percussing, it remains far from being a well-proportioned hammer, which is evident from the fact that so much more effort is required in percussion with the fingers than with a properly constructed hammer.

The lessened amount of effort and skill required to secure precision and uniformity in percussion with the instrument advocated, is its great advantage for general use, while the possibility of finer or surer distinctions between sounds which simulate each other, is its claim to attention on the part of those who are skilled in the use of the finger. Judging from practical experience, it seems to be particularly adapted to light percussion, and the differentiation—especially over small areas—of flatness from dullness, of slight dullness of apex of right lung and of other parts from normal resonance, of indistinct tympanitic or amphoric resonance from normal pulmonary resonance, and of faint vesiculo-tympanitic resonance from dullness, as over the anterior borders of lungs, yielding a percussion note of heightened pitch.

The hammer is superior to the fingers also in forcible percussion, employed to explore deep tissue. The three fingers can certainly bring out more resonance than the hammer, and hence are more valuable for classroom demonstrations, but dividing the force of the blow over three points, they are not as well adapted for developing the resonance of the deep tissue as of the surface of the lung.

The greater suggestiveness of a free, swinging, wrist motion, which the handling of a hammer with heavy head and light flat handle gives, as well as the greater ease of that motion with than without the hammer, tends to fulfill the most important requisite of a good percussor—a naturally acquired use.

The third condition of success—a firm, yet elastic striking surface—is equally possessed by both the finger and the hammer of Winterich. One fault with the ordinary percussion hammer is an excessive elasticity of the rubber head. In the German hammer the shallow piece of rubber at the end of the head, like the skin over the bone at the end of the finger, fully serves to protect the stroke-receiving finger, to quicken the rebound, and to deaden somewhat the sound of the pleximeter, if such be used. A long piece of rubber, such as forms the entire head of the ordinary percussion hammer is far less effective, particularly if the gum be unusually elastic. It will not bring out the sound of which a metallic instrument is capable, even if forcibly employed.

A peculiarity of construction that also contributes to the efficiency of the hammer advocated in this article, is the perfectly flat handle, which aids both the uniformity and precision of the stroke.

Not the least recommendation of a good percussion hammer is the ability to use it in constrained positions, where the fingers, from lack of reach or leeway would be too cramped for effective use; as in cases where

the patient from pain or weakness is unable to sit up in bed, yet where a physical examination of the chest is all important. Here the hammer is vastly superior to the hand.

In conclusion, we would say with regard to a subject which may seem hardly deserving of such lengthy consideration, that indispensable as is a perfect knowledge of the characters and values of the various physical signs to be obtained by percussion, its manual or mechanical part is still more indispensable, because it is the only means of becoming practically so familiar with those characters, that their recognition may be depended upon, and their proper value be given them in the physical diagnosis.

XCVI.

Biography of Erastus A. Munger, M. D., of Waterville.

In the death of this eminent physician this Society, and the profession, have to lament the loss of a most valued member, long and widely known throughout the central region of the State, and as widely esteemed and honored for his many excellencies of professional and private character.

Dr. Munger was born in Copenhagen, Lewis Co., N. Y., February 12, 1813. In his medical education he had the advantage of the best opportunities then available. Among his private instructors were Drs. Haven, of Waterville, where his family then resided, Welcome Clark, of Whitesboro, and Prof. Frank H. Hamilton, of New York. His collegiate course was diligently pursued at Fairfield, and afterwards at Jefferson Medical College, in Philadelphia, where he graduated in 1835. He then began to practice in Waterville with encouraging success, of course according to the methods in which he had been trained, homœopathy, not having as yet gained even a foothold in that section. Within a few years, however, reports of the advantages of this new system attracted his attention, and gradually aroused a desire to examine for himself, the principles upon which it was founded, and to judge by actual experience of the validity of its claims to superiority.

Accordingly, in the summer of 1843, he visited New York, where he spent some time in conference with Drs. Gray, Freeman, Bayard, and other representative converts and in making such observations and trials of homœopathy, as presented themselves. The result of his investigation, thus began, was ultimately to convince his judgment of the truth of the fundamental axioms of Hahnemann, and to induce him to adopt his practice to their requirements. The open avowal of a change so radical in his principles and treatment, could not fail to excite the animadversion of his colleagues in Oneida Co., where he became the first professional standard-bearer of homœopathy. Few combatants for the truth of our doctrines have had to experience more ridicule and abuse than Dr. Munger, during the early years of his conversion. How he succeeded in maintaining his ground, overcoming prejudice, and planting our system on a solid basis of

prosperity, is well known to all the members of this Society. He was not an inactive or timid disciple of the new medical faith, but its staunch and unhesitating defender and advocate; and it was not long before he was joined by others, older converts and young recruits—and he lived to see the system, of which he was a solitary pioneer, acknowledged and approved by large numbers of the profession, in his vicinity, and accepted and trusted by multitudes of the most intelligent and sensible of the community.

By his influence, and under his instruction, many valuable members have been added to our ranks. Drs. Raymond, formerly of Utica; G.W. Bailey, of Elizabeth, N. J.; A. B. Southwick, of Rome; S. H. Talcott, Superintendent of the State Homœopathic Insane Asylum, at Middletown, and others, were once his students, and feel honored in having had him for their master and guide. He was active in the organization of the State Society, as well as in that of Oneida Co., and of Central New York, in all of which he served in the positions of highest honor. He was also a member, since 1848, of the American Institute of Homœopathy, and consequently a "veteran" since 1873.

As a physician of unusual ability, and a representative Homœopathist, Dr. Munger was known and honored throughout the State; as a man and citizen of highest character, he was held in enviable repute by all classes of the community in which he lived and labored so long and so faithfully.

His health had been gradually failing for a few years past, but without evidence of any particular disease. His death, which occurred November 4, 1879, was attributed to general debility. The day following this event, a meeting of the Oneida County Homœopathic Medical Society was held in Utica, at which resolutions were adopted expressive of the evident sorrow which pervaded the hearts of his surviving associates. These resolutions were enforced by appropriate remarks from Drs. Wells, Watson, and others. Dr. Munger had been married three times, but had been a widower for fourteen years. He leaves a family of two sons and three daughters.

XCVII.

Biography of Stephen D. Hand, M. D., of Binghamton.

Dr. S. D. Hand was born in New Lebanon, Columbia Co., N. Y., Oct. 6th, 1806, and died in Binghamton, New York, March 10th, 1879, aged 72 years. His parents were in limited circumstances, and feeling a desire for better advantages than his father, who was a farmer, was likely to give him, he purchased his time after the age of 15 years, and earned enough by the sweat of his brow, and by teaching school to enable him to obtain a fair education.

He studied medicine with Drs. Dayton and Wright, of New Lebanon, graduated at Berkshire Medical College, at Pittsfield, Mass., in 1831, and

entered at once on the practice of his profession in Coeymaus, Albany Co., N. Y. April 8th 1832, he married Miss Elmira Hayward, of New Lebanon, and shortly after removed to West Stockbridge, Mass., where he practiced two years, when he located permanently in Binghamton, N. Y., in 1835, bringing with him to this place a wife and child, and a load of indebtedness amounting to six hundred dollars, incurred in obtaining his medical education.

Of his career as a physician it is enough to say that it was an eminently successful one, so acknowledged by friends and enemies alike. About 1847, Dr. Hand's inquiring mind led him to look into the merits of the homœopathic system of medicine. Careful experiments soon convinced him of the truth of the law of "similia, similibus, curantur," and he abandoned the "regular" for the scientific method of prescribing for disease. This defection of a former president, and one of the most prominent members of the Broome County Medical Society, produced great consternation among them, as the following extracts from an address by their president in 1851 abundantly prove:

"For a number of years, Dr. Hand commanded the respect and good will of his professional brethren, and had acquired a respectable rank as a practitioner. He early became a member of this society, was elected to its highest office, was foremost in the advocacy of a rigid code of medical ethics, and earnest in his denunciations of quackery, in every form. In 1842 he was president of this society, and at the annual meeting held the 11th of January, in that year, he delivered a public address at the Court House, in Binghamton, which was published by direction of the society. He has since abandoned his old professional associations, and turned his back upon the regular practice of medicine, for the infinitesimals of Hahnemann. Dr. Hand is now an homœopathic physician, in which vocation, it is not to be denied, but what he has been *pecuniarily* successful.

"The abandonment of the regular practice by Dr. Hand, was not without its effect upon his former associates in the profession. It gave prominence to homœopathy, induced many to become for a while, believers in its absurdities, and consequently increased the embarrassments which the regular profession has always encountered from the various systems of quackery. Justice to ourselves and to the profession at large, requires that in giving publicity to Dr. Hand's conversion to homœopathy, (which we could not fail to do, in giving this notice of his former connection with this Society), we should also state the probable reasons which induced such change. Believing as he alleges in his address, referred to above, that 'in this county, the quack, with some system or other, of ridiculous mummery, walks into the house of the merchant, the lawyer, the minister of the gospel, the justice of the peace, the judge, the Senator,' etc., all of whom, he asserts 'are willing to be cheated again and again;' and believing also, that 'the number of persons in the community, whose minds are free from every quackish delusion, is *very small, much smaller than is generally supposed*,' we are justified in presuming that the temptation proved too strong for the Doctor's heroic, professional virtue.

"The domain of quackery in his estimation, was more extensive, and its

rewards more munificent in the County of Broome, than those of the regular scientific practice. So with the 'absurd delusion' of Homœopathy in his hand, he has entered that field. There the members of this society take professional leave of him. They do not covet him his rewards, much less do they envy him the reputation which will follow him. In the practice of a noble profession, they will strive to act well their part, with honor and fidelity to truth and science, and though they may fail to receive in return a rich pecuniary recompense, the rewards of an approving conscience will be theirs, 'which is better than gold, yea, better than fine gold.'"

Dr. Hand soon attained a leading position as a homœopathic practitioner, and probably has done more than any other one to advance the cause in Broome County, and make homœopathy the popular system of practice that it is to-day in Binghamton. He was a member of the State Society, and whenever present at the meetings, took a prominent part in them, and his opinions, both in the State and local societies, always carried with them great weight. He died suddenly, at the railroad depot, on the morning of March 10th, 1879, while waiting for a train to convey him to Cortland, where he was to meet a physician of that place in consultation, and he has left behind him a professional reputation, which any of the members of the society who listened to the address, from which I have quoted, might well covet.

The following extracts taken from articles published in the local papers give some additional facts of interest regarding his life outside of his profession, and also testify to his high standing in the community, where he spent the best years of his life:

"The late Dr. Hand has always taken a prominent part in local politics, and in temperance reform. He was a strong Abolitionist, and so often assisted, protected and harbored, slaves on their way to Canada, that his house was known as one of the stations of the 'Underground Railway.'

"The Doctor suffered the ill-treatment to which the advocates of the then unpopular anti-slavery cause were subject. His ability and worth, however, were recognized by his election to membership in the Constitutional Convention in 1867. In his own city he was for some time a Commissioner in the Board of Education."

"Personally Dr. Hand was highly esteemed by those who knew him best, and beneath his brusque demeanor he had a heart as open as day to the suffering, and his charity was of that unostentatious character that willingly gave in secret, and blushed to find it fame. Everywhere he was esteemed for his philanthropy, his kindness and sympathy for the poor, the distressed, the sick and dying. His was a busy life and he was never idle. He sought no high position, but was willing to stand in advance of his day, in the front of battle, for his opinions. He will be long remembered for his intellectual, moral, religious and true social nature, and will leave vacant a place that years will scarcely fill. Probably the most prominent feature of his life was his zealous piety, which none who were acquainted with him can be unfamiliar with. He was converted in early life, and was an active member of the church up to his death, his seat seldom being vacant, always attending upon the means of grace, whenever health admitted. His life was worthy of imitation, and was a verification

that 'the chief end of man is to glorify God and enjoy Him forever.' Truly of him it may be said, 'all the days of my appointed time will I wait till my change comes.' Dr. Hand has lived here for over forty-four years, and now, at seventy-two years of age, he passes to that bourne from which no traveler returns, full of years, full of honors, amid the lamentations of many friends and acquaintances, and it may truly be said of him that he has fought the good fight faithfully."

Dr. Hand leaves a widow and two sons, Dr. Geo. F. Hand, and Walter M. Hand, Esq., both of whom are practicing their respective professions in Binghamton.

XCVIII.

Biography of Daniel D. Smith. M. D., of Brooklyn.

Dr. Daniel Drowne Smith was born in Portsmouth, N. H., December 16th, 1807, and died in Brooklyn, N. Y., March 17th, 1878. He was the son of Elias Smith, a clergyman possessing a most retentive memory, native powers of persuasion and untiring industry, well known through the New England States, in the latter part of the last century, but who, later in life, devoted himself to the practice of medicine. As a practitioner of the Thompsonian school, he traveled extensively, and under his tutelage the subject of this memoir commenced, at the early age of eighteen, to visit the sick and practice the healing art.

A natural love for the study of medicine, prompted him to investigate the remedial efficacy of drugs at this early period of his life, and great sympathy with his kind led him to the bedside of suffering humanity. He possessed wonderful power in reading disease, which combined with great personal magnetism, secured him a large practice, even at this stage of his work. As years rolled on, he became a very close student, and satisfied that his vocation in life was that of a physician, he availed himself of every opportunity for the enlargement of his mind, and the acquisition of knowledge. He attended medical lectures in Boston; from the Massachusetts Medical College received his diploma as an M. D., of the old school, and practiced many years in Gloucester and Boston, Mass.

It was about the year 1841, that the attention of Dr. Smith was called to the new school of practice, then agitating the medical world of Boston and other cities. After careful and due investigation of the Hahnemannian doctrines, he adopted them, and remained an adherent to their principles through life.

In 1848 he removed to New York, in which State he continued to reside until the time of his death. For nine years he occupied the important chairs of Chemistry, Physiology and Obstetrics, in the Homœopathic Medical College of New York, then in its infancy, and many of the successful homœopathic practitioners of to-day recall the cheerful, genial presence of their professor, whose skillful handling shed light and

clearness upon any subject that he taught. Dr. Smith labored untiringly for this institution, sparing not himself, that it might rank with the colleges of the old school. A large private practice, added to his labors in the college, affected his health eventually, and he sought a country home, continuing office practice in the city for two years after his removal to Rockland Co.

In Spring Valley, for ten years he pursued with energy and success his calling, and was instrumental in organizing the Rockland County Homœopathic Medical Society, when finding that he could no longer endure the exposure incident to country practice, he removed to Brooklyn, where he was warmly welcomed and his long experience and skill opened a field of labor to him less fatiguing. Many former students sought his advice and aid in difficult cases. The hopes entertained by his friends of an extended future of usefulness and many years of pleasant, calm retirement from the laborious duties of his profession, were doomed to disappointment. A disease of the heart, more or less troublesome for three years, suddenly terminated his life, in the 71st year of his age. The funeral services were held in Plymouth Church, of which he was a member, and which was filled with his numerous friends and relatives. Besides his qualifications as a physician, he was a ready and eloquent speaker, a fine musician, a mechanical genius, and possessed of extensive and varied information in general science.

XCIX.

Biography of Harrison V. Miller, M. D., of Syracuse.

Died Nov. 26, 1879, Dr. Harrison V. Miller, aged 51 years. He was a native of the County in which all of his professional life was passed, and in which he died. He was born in Apulia, Sept. 17, 1828, graduated from Hamilton College in 1857, and for several years taught school in Mississippi, Ohio and California. After that he devoted himself to the study of medicine, and received his doctorate from the N. Y. Homœopathic Medical College in 1862. His first field of practice was the town of Pompey, but in about three years he removed to the city of Syracuse, where he soon gained an assured position, and where he continued to reside till his death.

He was a most active and useful member of several medical societies, and contributed many valuable papers to their archives. For ten years he faithfully performed the duties of Secretary to the Central New York Homœopathic Medical Society, and often served as president or other officer in the Homœopathic Society of his County. He was also a member, since 1871, of the American Institute of Homœopathy. In his profession, as in all the relations of life, he was proverbially sincere, honest, progressive, and his worth as a citizen, and as a man, was generally ac-

knowledged by all who knew him. For a number of years before his decease, he was more or less of an invalid, as the result of an attack of paralysis, a second attack of which was the immediate cause of his death. In 1858 he married a daughter of the late Victory Birdseye, of Pompey, who, with her four children, survive him.

C.

A Biography of Lyman B. Waldo, M. D.

Lyman Byles Waldo was born at Edmeston, in Otsego County, N. Y., April 9th, 1815.

His parents were natives of Connecticut, from which State they moved to New York about the year 1799. He was one of twelve children, nine of whom lived to adult age. One of his brothers died of cholera in 1832, since which time there had been no death among the eight surviving children, till his own death in July, 1879. His father lived to the age of ninety-one years, and his mother to the age of eighty-five years, and the ages of his seven surviving brothers and sisters range from seventy-eight to sixty years.

His father's name was Lyman Waldo, and his mother's maiden name Abigail Smith.

When about twenty-three years of age, he decided to enter the Christian ministry, and commenced preparation for college at the Fredonia Academy, at which institution he remained two years, entering Hamilton College in 1840, and graduating in 1844. He immediately entered Auburn Theological Seminary from which he graduated in 1847. During all these years in which he was acquiring an education, he earned a considerable part of his support by working on farms. Was married to Mary S. McEntee, July 7, 1847, at Whitestown, N. Y. He was ordained a minister of the gospel by the Presbytery of Buffalo, in 1849. His first field of labor was in Huron, Wayne Co., N. Y., which he was obliged to abandon, on account of ill-health, after a pastorate of six months. It was two years before he was well enough to again assume charge of a church. He then settled in Centreville, Allegany, Co., N. Y., taking charge of two home-missionary churches. After four years he was again compelled to abandon his work, on account of ill-health. During the following three years, when his health would permit, he acted as an agent for the American Bible Society. In 1856, he assumed charge of the Congregational church in Eaton, Madison Co., N. Y., but was soon compelled again to give up the work on account of ill-health.

Finding that the peculiar character of the work of the ministry was not compatible with his health, he commenced the study of medicine and graduated from the Cleveland Homœopathic Medical College in the spring of 1863. He immediately located in Adams, Jefferson Co., N. Y., where

he practiced his profession till 1869. In the latter year he moved to Oswego, where he practiced four years, and thence to Lansingburgh, Rensselaer Co., where he practiced five years. Failing health made it necessary for him to retire from the more active duties of practice, and he removed to West Troy, N. Y., in March 1878, where he died of bilious fever July 9, 1879.

Dr. Waldo contributed frequently to current medical literature, and always took an active part in medical society matters. He was for several years a member of the Executive Board of the State Homœopathic Medical Society, and was president of the Homœopathic Medical Society of Northern New York, also of the Oswego Co., Homœopathic Medical Society. After commencing the practice of medicine, he retained his connection with the ministry of the Presbyterian Church, and, at the time of his death, was a member of the Presbytery of Troy.

CI.

Biography of George F. Hurd, M. D., of Rochester.

Among the younger members of our school, whose early death has blighted the well founded hopes of future eminence in the profession, none deserve commemoration in our annals more than the subject of this notice.

Dr. Hurd was born in DeWitt, Onondaga County, N. Y., January 21, 1850. After leaving school at an early age, on account of an affection of his eyes which compelled a complete suspension of study for two years, he enterd the Seminary at Cazenovia, where he completed his literary course. At about twenty years of age he commenced the study of medicine in the office of an uncle—Dr. Darius E. Hurd, of Fayetteville,—but not long after attracted by the superior advantage for study in a large city, he removed to Rochester, and continued his course under the instruction of another uncle, our well known member, Dr. E. H. Hurd. At the same time he took a partial scientific course at the Rochester University.

In 1870 he matriculated at the N. Y., Hom., Medical College, from which he graduated with honors in 1872. During the whole of his attendance at the College he was an example of diligence, regularity and decorum. With the instincts and habits of a gentleman, an aptitude for learning, and an untiring industry, he could not fail to attain a high position in the estimation of his Professors and class-mates. At the end of his first year he carried off the chemical prize.

After graduating, he returned to Rochester and became associated in practice with his uncle and former preceptor, Dr. E. H. Hurd. This connection was very favorable to the acquisition of a fine practice and he soon found himself actively engaged in professional work. This he pursued with the assiduity and attention that was natural to him, until seized with the sickness that ended in his early death, on the 29th of September 1876. Soon after his return from the World's Homœopathic Convention

in that year, at Philadelphia, he began to show signs of illness, which culminated in a violent typhoid fever, from which he died in the very prime and vigor of his life, which was one of unusual promise.

He was a christian in faith and pratice—a member from early years of the Presbyterian Church, sincere in his belief and unobtrusive in his piety, but under all circumstances exemplifying his principles by his conduct.

[The foregoing brief tribute is condensed from an extended and truthful memoir of our former colleague, by Dr. W. P. Fowler, of Rochester, prepared at the request of the Monroe County Homœopathic Medical Society.]

CII.

Biography of James M. Cadmus, M. D.

BY A. P. HOLLETT, M. D.

Dr. Cadmus, the subject of this sketch, was the son of Andrew and Elizabeth Cadmus and was born in the village of Lodi, Seneca County, N. Y.. on the third day of July, 1834. When about nine years of age, in 1843, immediately after the death of his mother, he went to live with the Hon. D. B. Bryan, at Sonora, Steuben County, N. Y., whose kind beneficence he ever after enjoyed, making his house his home, until he had one of his own. He enjoyed the advantages of an Academic education at Sonora Academy, under the tutorship of Prof. W. W. Runyan, A. M., who considered him a very apt and proficient student which was ever one of the marked features of his life. Soon after completing his preliminary education, he commenced the study of medicine under the supervision of the late Dr. H. S. Benedict, which he continued with him and in attending one term of lectures at the Western Homœpathic College, at Cleveland, Ohio, until August 1st., 1862, when the tocsin of war, in the contest to suppress the rebellion, called him from his books to the field of carnage.

He assisted in raising Company D, of the 161st. Regiment, New York Volunteers, with which he served during their term of service, until after the close of the war, over three years, and was finally discharged at Fort Jefferson, Florida, on September 20th, 1865.

On the organization of the company he was elected First Lieutenant and soon after promoted to the office of its Captain, which although offered other promotions, he retained until the close of the war, prefering to remain with the men to whom he was much attached.

He participated in the following battles, viz: The engagement of Plain Store, May 21st, 1863; the siege of Port Hudson, from May 21st. 1863 to July 8th. 1863; Cox Plantation, La., July 13th, 1863; Sabine Cross Roads, La., April 8th. 1864; Siege of Mobile, Ala., at Spanish Fort, April '65. He was wounded at Cox Plantation, July 13th, 1863 and also Sabine

Cross Roads, April 8th, 1864, which wounds troubled him more or less during the remainder of his life; particularly the one in the face, which was caused by a ball entering the neck, nearly under the right ear and passing out through the buccinator muscle of the otherside, fracturing in its course, the inferior maxillary bone. The winter following his discharge from the army he attended his last course of lectures at the Western Homœopathic College, at Cleveland, Ohio, from which institution he graduated in February, 1866.

Soon after graduating he entered into partnership with his preceptor, Dr. Benedict, at Corning, Steuben County, N. Y., where he remained about one year when he removed to Hammondsport, Steuben County, New York, where he practiced his profession for several years. In the spring of 1873 he removed to Waverly, Tioga County, New York, where he spent the remainder of his life and where he was successful in building up a large and remunerative practice. He became a member of the American Institute of Homœopathy, at their annual session in 1871, and also a permanent member of the Homœopathic Medical Society, of the State of New York, at the annual session of 1873, and at one time was Chairman of its Bureau of Materia Medica. He was one of the original members, who assisted in the organization of the Steuben County Homœpathic Medical Society, and also of the Southern Tier Homœopathic Medical Association, of New York, and was ever one of their most active members. He was an occasional contibutor to the literature of the profession, notable among which was an article on Oxalate of Cereum, in Treatment of Morning Sickness. He was married to Miss H. A. Tompkins, of Sonora, N. Y., in 1863, who together with two young children still survive him. He died suddenly of Apoplexy, at Waverly, N. Y., on May 10th. 1879. The funeral services took place at Sonora, N. Y., and he was buried in the family plot at Tyrone, N. Y. He was a member of the Masonic fraternity and his funeral was attended by members of the craft, from Waverly and Tyrone, who performed their last rites over the remains of their departed brother.

CIII.

Biography of Hylon Doty, M. D., of Wellsville.

BY H. C. COON, M. D.

Died in Wellsville, Allegany Co., May 5, 1876, Dr. Hylon Doty, aged 58. He had been in poor health for a number of years caused by overwork, care and trouble, and the increase in business cares brought on exhaustion that terminated in his death. His final sickness seems to have been the result of a general wearing out of the physical organization. He had resided in Wellsville about a year and a half, and had by his consistent Christian life, and his marked success as a physician, won the

confidence of the community, who mourn his loss and deeply sympathize with his wife and daughters in their sore affliction.

He was born in the town of North-East Dutchess Co., July, 1817. His father died when he was quite young, leaving him to rely upon his own resources for his education. He graduated at Cincinnati in 1852, having studied under Dr. Munger, of Waterville, for three years, and practiced some seven years before he graduated.

Having early had his attention called to the treatment of the insane, he determined to establish a retreat for such, where they could be treated homœopathically. He obtained a charter from the Legislature for such an institution, in 1869. This was established in Margaretsville, Delaware Co., the first Asylum for the treatment of this unfortunate class of patients according to the system of Hahnemann in the world. His earnest and persevering efforts to carry out his benevolent design, were not correspondingly seconded by the profession throughout the State. His appeals for assistance were, to a large extent, unheeded, and the result was the failure of the undertaking, according to the plan proposed by its originator. The location he had selected was considered unfavorable for such an institution, and various other objections were made to some of the details. The disappointment at the lack of encouragement and the pecuniary losses to which he was subjected, weighed heavily on his mind, and, no doubt, contributed to the cause of his subsequent ill-health. To his efforts, however, though unsuccessful so far as his particular scheme was concerned, was doubtless owing the subsequent more fortunate enterprise for the building of an asylum for the insane at Middletown, Orange County.

Dr. Doty was a prudent and careful prescriber, conscientious and upright in his conduct, modest and retiring in disposition. He was much beloved by those who enjoyed the benefit of his ministrations, and his memory is held in reverent honor by all who knew the many merits of the man.

CIV.

The State Board of Health.

BY J. SAVAGE DELEVAN, M. D.

On the 18th day of May, 1880, a bill passed both Houses of the Legislature, incorporating a State Board of Health, for the Empire State, and being signed by the Governor, became a law, constituting the 23d. State Board of Health of the United States of America.

This long sought for and much needed measure, was rendered necessary by the growing demand both by the people and by the medical profes-

sion throughout our State, for a Central authority in matters pertaining to the public health; the results obtained by the work done by Health Boards in other States, showing conclusively the immense importance of official attention to all that can promote the best sanitary condition of the people. Of the work and progress of the New York State Board of Health, I would desire to speak to the Society for a few moments.

The importance of sanitary reform, of correct and careful investigation of the causes detrimental to health and life; together with a thorough and uniform system of vital registration is universally admitted, and while recognizing the necessity for such action, there being no Central Bureau to which to apply for advice and counsel, the existing laws relative to health and its preservation were generally a dead letter throughout the State, and statistical information concerning disease and death was vague and uncertain.

To endeavor to remedy this existing condition of affairs, to establish an interest in hygiene and sanitary reform, to bring order out of chaos, in fact, were the important duties devolving upon those who were called to serve the State as members of the Board of Health. How far they have succeeded from the commencement of their labors to the present time, it is for the profession and people of the State to judge. To a brief summary of their labors, let me crave your attention.

To originate and organize a reform of any kind, is a task involving much thought and earnest study, and regarding the dissemination of information as the first step to be taken in order to secure an interest in the work of sanitary reform, the State Board of Health, immediately after its organization, addressed a circular to clerks of school districts, town and village clerks, and Boards of Supervisors throuhout the State, calling their attention to the laws existing relative to vital registration accompained by sample forms as adopted by the Board for the uniform and complete registration of births, marriages and deaths, together with permits for the burial of the dead, and transfer permits for the removal of deceased persons from one part of the State to another. These were accompained by short instructions for the use of the blanks, copies of proposed headings for books of registry, with details concerning the lowest cost of printing as ascertained by the Secretary of the Board, and all needful information cancerning registration, as well as copies of the laws existing relative to the preservation of health and life, and the law creating the State Board of Health,. These were sent to the proper authorities throughout the State and to many physicians, to the number of more than 14,000 persons.

This labor alone occupied over two months, being completed in September last.

The form and style of these certificates are familiar to many of you; as with the limited issue the Board has endeavored to distribute the surplus remaining, after the proper authorities were supplied, amongst physicians throughout the State. They have been carefully prepared and are the result of the combined experience of the most eminent of vital statisticians of our own country and of Europe, and are framed in accordance with the plans agreed upon at the National Conference of Vital Statisticians and Health Officers, held in Washington, in May.

These forms have met with general approbation, although objection has been made in a few instances to the amount of information required by the certificates. Consideration, I think, will show this objection to be unfounded. The fact that previous to the issue of the forms recommended, by the State Board of Health, no uniform method of vital registration existed in our commonwealth, each city or corporation adopting forms for themselves, as they severally grew into the appreciation of the immense value to their people of the statistical knowledge of their vital movement, and that these widely differing methods, necessarily imperfect from want of uniformity, have been and still are, of incalculable value. This fact I say, is a proof positive of the imperative necessity for a universal system of vital registration, one that shall be adopted by every village, town, city and county throughout the State. Thus securing perfect uniformity and regularity at the Central Bureau of Vital Statistics at the capitol. It is believed that the forms and books for registry as advised by the State Board of Health will secue this much to be desired end, and as each and every interrogation has been carefully considered, it is to be hoped that in time they will all be as carefully answered by those making the returns. Perfection in the carrying out of any undertaking should be the aim of all, so in this important duty devolving upon the Board, they have striven to make the means of record of Vital Statistics as perfect as possible. Already many counties through their Boards of Supervisors, have accepted and adopted these forms and the work of uniform registration is now fairly commenced. So before the close of another year it is confidently expected and believed that the system will become universal throughout the State.

But it is not alone to the registration of births, marriages and deaths, that the State Board of Health has directed its attention. The study of prevalent and epidemic diseases has received due consideration. No record of the movement of the population can be perfect without this important item. The knowledge of what diseases are causing, not only the yearly death rate; but the year record of sickness amongst the people, their character, location and causes, together with the sanitary surroundings of the localities visited by disease are most important subjects of consideration in the work of improving the health of the population. As a preliminary step in collecting such information the State Board of Health authorized its Secretary to issue schedule lists of deaths and prevailing diseases with sanitary observations printed on postal cards to the number of 350 each month, commencing with June 1880. These have been sent to health officers and physicians throughout the State, with a request that they should be filled out and promptly returned to the Central Bureau of Vital Statistics, at Albany, and furthermore, a request was made that any peculiarities or interesting data, that could not find place on the cards, should be commented upon by letter, to the Superintendent of Registration, the Secretary of the board. The returns from this simple method have been prompt, and much valuable information concerning prevailing and epidemic disease throughout the State, has been received, thus forming the nucleus of a thorough statistical knowledge of such diseases. Such knowledge will be of the greatest importance in originating methods of prevention, from a correct understanding of the causes and location of certain diseases and establishing a correspondence with

physicians and others throughout the State, who are interested in the work of sanitary reform. So much for the progress made in the matter of vital registration.

With regard to the study of particular epidemics reported to the State Board of Health.

There have been under consideration epidemics of diphtheria in Geneva, Seneca County, in Hamilton, Fulton, Oneida and Otsego Counties. Dysentery in several villages of the State, enteric fever in several localities, malaria at Hart's Falls, Rensselaer Co., and in numerous other places, as also a recent epidemic of small pox, in Troy, West Troy, Lansingburgh, Waterford and Cohoes. Each one of these epidemics has received due consideration and full reports concerning them with maps of the localities affected have been obtained.

Suggestions as to their prevention in the future as well as to means advised for their suppression, have been made, and as far as possible, carried into effect. Information and knowledge gained from their study will enable the State Board to act with greater success in the future.

By referring to the laws creating the State Board of Health, Chap. 512, laws of 1880, it will be seen that one part of the duties of the said Board consist in the investigation of nuisances existing in any locality throughout the State, when ordered to do so by the Governor. Several such orders have been issued, notably the great nuisances of Buffalo, the Hamburg Canal, that open sewer which is the receptacle of the filth of the city, the nuisance existing at Hart's Falls, Rensselaer Co., caused by the obstruction of the channel of the Hoosic River, by a railway embankment, creating a succession of stagnant pools, which have carried malarial disease to an alarming extent amongst the people of that village. Each of these nuisances has received the careful attention of the Board, and reports have been made concerning them to the Governor. It is proper to remark that one of these nuisances, that of Hart's Falls, has been ordered abated. Others are in progress of investigation, and in the next report will be duly mentioned.

It cannot be expected that in a few months great results can be shown, perhaps it is enough to manifest that a fair commencement has been made, that the machinery for the perfecting of sanitary work is moving, and that even in this, the infancy of its existence, the State Board of Health may show that their labor has not been without fruit.

Summing up then the work performed thus far, we have the commencement of vital registration uniform and exact throughout the State.

The study of epidemics and prevailing diseases reported to the Board during the year, with advice and hints as to their suppression and prevention in the future.

Te investigation of nuisances as ordered by the Governor. The publication of laws relating to the preservation of health and life, with model sanitary ordinances, and finally the detailed reports of the committees with the results of their labors.

The full report will, it is hoped, be ready in March, with the detailed work of the seven committees in full.

These committees are as follows:

An executive and finance committee.

A sanitary committee.
" committee on registration and vital statistics.
" " " sanitary legislation, rules and regulations.
" " " external and internal quarantine.
" " " public institutions; and
" " " drainage, sewerage, and topography.

The president and secretary being ex-officio members of all the committees, and the secretary being superintendent of registration according to the law creating the Board.

It is not my intention to give you in advance this full report, I aim rather to interest you in the work of the State Board of Health, and to invoke your personal aid. From all parts of the State we have received the kindest and most valuable assistance from members of the medical profession, and I should fail in my duty as one of the members of the Board did I not say publicly how much we are indebted to them. I am also proud to say that our own school has contributed its full share to the amount of knowledge gained, and to many before me to-day, we are largely indebted for reports and descriptions of particular diseases of a most interesting and instructive character.

Finally, in reviewing the labors of the first year of its existence, the State Board of Health are encouraged by the interest shown in their work, both by the medical profession, and the people of our State, as well as by the tone of the press, and they ask that each and every physician in our commonwealth may continue to aid, both by their influence and counsel, the work so recently inaugurated, having for its object the preservation of the health and life of the people of the Empire State.

CV.

Medical Colleges and Medical Education.

BY CHARLES CROPPER, M. D.

Medical schools are a necessity, not only for the purpose of imparting the knowledge of the fundamental branches upon which the practice of medicine rests, to those designing to enter the profession of medicine, but they are a necessity also, as a means of furnishing an essential part of a liberal education; for no one can now, with any propriety, be said to be liberally educated who has not attained to a creditable proficiency in the essential branches of a medical education. And in an age so eminently practical as this, what can be considered more important than that self-knowledge, without which all other knowledge if attained, will fail to be utilized to the fullest extent. The practical part of a medical education—that which is essential only to the members of the medical profession, can only be acquired at the bedside, and through actual experience. For this class special provision in separate institutions should be made. It is admitted, if not in so many words, at least in the general observations of the

fraternity, in private conversation, at medical gatherings and in the current literature of the day, demanding a reform in the methods of teaching and a higher standard of requirements upon the part of those who seek an entrance into the profession—that the colleges, as they now exist, fail to meet fully the views of a large portion of the profession as to what a medical college should be, and the kind of instruction it should impart. Much creditable progress has been made in the way of enlarging the curriculum, increasing the number of teachers, lengthening the time required for attendance upon lectures, nominally demanding a better preparatory education and the adoption of a graded course, although this is not sufficiently insisted upon, nor are the divisions of study in the course always the most judicious. Still, in my judgment, the real gain from all these efforts is so small that some more radical change is requisite, in order to insure the basic education, and the practical proficiency which the age demands. My objeetions to the college of all schools, as now organized and conducted, I will state as briefly and as concisely as possible, and then suggest another plan of organization, and another course of instruction, by which such, and many other objections may be obviated. Medical colleges as now constituted, are sectarian institutions, and their tendency as such is to beget a certain narrowness of mind inconsistent with the character of a man of science, and, therefore, with that of the true physician, who should be not only willing, but anxious to accept light and aid, come from what source they may. Again, medical Colleges are too often founded in the spirit of rivalry, and sectional pride, as well as for the purpose of securing personal advantages to those who aspire to the distinction of a professorship, the pecuniary gain which they hope to derive from such name and position, being the chief end in view.

A few men meet together, not to consider the good of the profession at large, nor the requirements or well-being of the community in which they reside, nor even the interests of the medical sect which they profess to represent, but solely with the view of the personal advantage to which reference has been made, and resolve that it is expedient that another college should be established in their midst, and as for the faculty of such college, not one of the number has the slightest doubt of his ability to fill any one chair, and some may even feel perfectly confident of being able to fill satisfactorily two or three chairs. Doubtless the majority would be just as competent, or rather just as incompetent, to fill one chair as another. Take away the sectarian character of medical colleges and the consequent appeal to sectarian support, and such institutions could not be organized, much less secure encouragement from any quarter.

Again, a college exists upon a fair basis as colleges now are, but a division occurs in the faculty, either upon theoretical or personal grounds; they cannot work together harmoniously, and, therefore, a part retire. The profession and the people cannot, of course, in their opinion permit them to simply continue in the discharge of the ordinary duties of the practitioner; they must be professors, and in order to afford a field for the exercise of their abilities as teachers, another college must be started, and high-worded circulars are issued in which their grievances are pathetically paraded, and the profession and the people assured that theirs is the true orthodox institution, and that with which they were recently con-

nected, is sham and heretical. I need not say that all fair-minded intelligent persons, either in or out of the profession, are inclined to the opinion that both could be advantageously dispensed with. To obviate these, and other objections to medical schools, as now formed and conducted, which I doubt not will suggest themselves to any one who has given the matter much serious consideration, I propose a general plan for medical colleges, as in my judgment they should be organized and conducted.

First, a well endowed medical college in each of the large cities of the country with faculties selected according to the well known fitness of each professor for his special chair. Second, the college shall be controlled by a board trustees, who shall have the entire dictation of all things in connection with the institution, excepting the teaching of the various branches of the course of instruction which the professors will conduct according to their own judgment, and in which they shall be aided by all the apparatus and appliances necessary to bring the instruction up to the highest requirements of the times. Third, the faculty shall receive a salary sufficient to command the best talent in each special department, and to justify them in devoting their entire time and study to the subjects embraced in the several departments under their charge. Fourth, graduation to depend upon the degree of proficiency which the students shall manifest upon a thorough examination by the faculty, the trustees having the right to call in as assistants at the final examination, gentlemen eminent in the departments of study embraced in the course. I suggest that anatomy, physiology, chemistry and sanitary science, in its amplest scope, shall be exclusively taught during a term sufficiently extended to insure the necessary degree of proficiency in these fundamental branches of a medical education. These, constituting as they do, not only the ground of medical science, but, also, of all rational practice of the art of healing should be thoroughly mastered before either the materia medica, therapeutics or any one of the branches of medical or surgical practice is entered upon. In the prosecution of the study of anatomy it will not be *necessary* for the *medical* student to practice dissecting, and thus the great waste of material in the dissecting room will be avoided, and the supply of material be rendered easy by legitimate means. To the *surgeon*, practical anatomy and operations upon the cadaver are essential to that intimate knowledge of the organism in all its parts and relations, and that manual dexterity in the use of instruments which are required in operations upon the living patient. In physiology the course should be as complete as possible, since no one can be expected to understand in what the deviation from health consists, until he knows what is the normal state; and if physiology be thoroughly comprehended, pathology will be readily acquired, since pathology is but the science of the functions and conditions of the organism in a state of disease. As to the science of chemistry and all its practical applications (a field so vast that no person can hope to attain to a respectable degree of proficiency in more than one department), in the course contemplated special attention should be devoted physiological chemistry or that part of the science and the art with which the physician is most concerned. How few of the practitioners of medicine—graduates of the existing medical colleges—have even a superficial knowledge of chemistry, or of toxicology.

In the domain of sanitary science, many matters of practical interest and importance claim the attention of the physician, but it is, as a science, comparatively new, and many vague conceptions exist in reference thereto; much speculation is indulged in, and physicians with but a smattering of what it teaches often make remarks which only serve to show how indefinite are their ideas, and how absurd their suggestions in regard to climatic influences, drainage, sewer-gas and its effects, ventilation, dietetics, etc., etc. People inquire in regard to all these matters, physicians should be able to give rational answers.

But, upon this point, as in the whole of this article, my object is to suggest, and not to elaborate.

Fifth, the degree conferred by such a college as I have endeavored to outline, should be that of Bachelor of Medicine, or a certificate of proficiency in the branches studied, may be issued as the trustees should deem most advisable. My own idea is that a specific degree to be the same in all similar institutions, should be adopted, so as to better carry out the prime object in view in all the suggestions of this paper, which is to place all who have pursued with equal advantages the same studies, and have satisfactorily passed the same thorough examination, precisely upon the same plane, entirely independent of any sectarian prejudices.

The advantages of such a course, limited to the branches designated in this plan, are obvious. And not only those who contemplate medicine as a profession, but every young man and young woman who aspires to a liberal education should be taught that these branches cannot be ignored. Self-knowledge, and the knowledge of the bearings of all our surroundings is the most important of all acquirements, and the young of both sexes should be well instructed in the art of living in accordance with the laws of life and health; to know in what health consists; how it may be retained when possessed; regained when lost, or secured to the fullest extent possible, when originally imperfect by reason of hereditary defects or early detrimental influences.

In such an institution the students would be gathered, free from the prejudices, and the bias of the sectarian schools; they would associate together as fellow-students on the same plane, seeking only scientific knowledge without knowing or caring how such knowledge may bear upon any theory of any school. In this way a far higher degree of proficiency in the basic branches of a medical education will be attained, because the whole time of the faculty and of the students will be devoted exclusively to these branches; a fraternity will exist among the students and graduates, who having associated together as ladies and gentlemen, in the pursuit of scientific knowledge without regard to opposing theories as to the practical application of such knowledge, will, when they enter the profession, be imbued with a liberality, such as cannot be looked for in those who are under the narrowing influences of too many of the medical schools as they now exist. Having pursued the same course of study and having received the same attestation of their attainments by those who are not pecuniarily interested in awarding a diploma, they will not assume any superiority by reason of the pecular system of practice which they may, afterwards be led to adopt. And with such a preliminary training the true student will yield

the palm of superiority, only to that system which demonstrates its superiority in actual practice. And now having laid the foundations of a medical education, if the student has decided to pursue the calling of a physician, he seeks the most favorable surroundings and facilities for acquiring a proctical knowledge of the duties of a physician. To meet this want and supply this need, I would have hospitals and dispensaries amply endowed, in number sufficient to accommodate all entitled to their provisions, and attached to these, I would have the best practical talent possible to secure; physicians of learning, and of the largest experience in the several specialties committed to their charge.

Medicine is an art and proficiency is only to be acquired through long-continued practice; hence, after the scientific ground-work has been laid the art should be learned, at the beginning, in public institutions where the largest number and the greatest variety of cases may be seen, and in the treatment of which the students should be constantly employed under the supervision of competent instructors. These institutions should be established by and under the control of the different schools of medicine, and if the State provides a fund for their support it should be equitably apportioned among them. Here practical medicine could be fully taught, and students, after an investigation by all the means at their command, would select the system which seemed best to them, and would enter the hospital college to pursue the course which would necessarily mingle the didactic with the practical in the whole field of practical medicine. Or, if a specialty was contemplated, he could limit his study and practice to the one selected. The degree of Doctor of Medicine, with system of practice in which he had been instructed, should be awarded to those proving themselves worthy of it. If any one was ambitious of being all kinds of a doctor at the same time, he should attend all the different schools and graduate therein.

If such a plan as I have thus briefly sketched, shall, in its practical operation, greatly reduce the number of graduates in medicine, and, consequently the number of the practitioners of the art, that would be a result over which, in my judgment, no philanthropist would be called upon to mourn. It is stated that in Germany the physicians are in the proportion of one to three thousand of the population while in the Utited States of America, the proportion is one to six hundred. I need not say that in this country at least, the supply is far in excess of any actual need and if the people at large were educated as herein proposed, and the physicians qualified and trained as herein suggested, and thus the quality of medical service improved, the number required would be comparatively small. The better educated the people in medical science the less frequently will they require professional aid, and when they do the better will they be prepared to discriminate between pretense and possession.

The partisans of the dominant school of medicine seem mainly desirous of persecuting all the inefficiency outside of their own fold and protecting all within. Hence are they extremely solicitous of State Boards of Examiners which shall consist exclusively of members of their own school and whose certificate shall be essential to the practitioner. And hence the annual pilgrimages to the different State capitals to secure by legislative enactment and legal provision, a status to which they feel assured,

neither their learning in the science nor their success in the practice of medicine entitle them. And yet some of these very men publicly lament their participation in the responsibility of imposing incompetent physicians upon the community by signing their diplomas as graduates of the colleges under their control, and thus certifying to their competency and trustworthiness.

If medical professors do this and feel compelled to continue the practice notwithstanding the humiliating confession, who shall we get for State Examiners in whom greater proficiency may be looked for, or greater consistency and honesty expected? As colleges are now organized and conducted, I see nothing reformatory to be obtained from a State Board such as is likely to be secured. How shall such a Board be appointed to insure competency and impartiality, and who shall examine the Examiners? It seems to me that the only safety for the people is in their own education in the direction and up to the point which will enable them to judiciously select a medical adviser when they need one, and the thorough scientific and practical training of the physicians which shall qualify them to give rational advice and efficient aid whenever such demands shall be made upon them.

Shall we not as homœopaths, consider whether we are not ourselves, contributing to the inefficient service and bad practice of the day, by reason of an imperfect system of instruction and training. If homœopathy is conservative by its great superiority in practice in the hands of the intelligent and skillful, may it it not be doing its share of evil through the all too-prevalent action of the colleges in pouring into the ranks of the profession graduates unfit for the responsibilities of the physician's calling.

Let us seek not to fill up the vacant places with homœopaths, merely in name, who discredit, rather than honor the cause, but in all places to supplant the false and injurious by firmly implanting the true and beneficent.

CVI.

List of Officers---1850 to 1881.

PRESIDENTS.

Isaac M. Ward.....	New York.....	First	District,	1850
Fred'ck Vanderburg*.....	Rhinebeck	Second	"	1851
Lyman Clary*.....	Syracuse.....	Fifth	"	1852
Alonzo S. Ball*.....	New York.....	First	"	1853
Amherst Childs*.....	Waterloo.....	Seventh	"	1854
Sam'l S. Guy.....	Brooklyn.....	Second	"	1855
M. M. Mathews*.....	Rochester.....	Seventh	"	1856
R. S. Bryan*.....	Troy.....	Third	"	1857

*Deceased.

Ethan A. Potter*	Oswego	Fifth District,	1861
Jacob Beakley*	New York	First "	1862
Henry D. Paine	New York	" "	1863
Erastus A. Munger*	Waterville	Fifth "	1864
Abijah P. Cook	Hudson	Third "	1865
Horatio Robinson	Auburn	Seventh "	1866
Benj. F. Cornell*	Moreau Station	Fourth "	1867
Wm. H. Watson	Utica	Fifth "	1868
Wm. Wright*	Brooklyn	Second "	1869
Lucien B. Wells	Utica	Fifth "	1870
John F. Gray	New York	First "	1871
H. A. Houghton	Keeseville	Fourth "	1872
E. D. Jones	Albany	Third "	1873
L. M. Kenyon	Buffalo	Eighth "	1874
A. W. Holden	Glenn's Falls	Fourth "	1875
Timothy F. Allen	New York	First "	1876
Egbert Guernsey	New York	" "	1877
Wm. Gulick	Watkins	Sixth "	1878
A. S. Couch	Fredonia	Eighth "	1879
A. R. Wright	Buffalo	" "	1880
Selden H. Talcott	Middletown	Second "	1881

VICE-PRESIDENTS.

Dr. Dufee Chase*	Palmyra	1st Vice-President,	1850
R. S. Bryan*	Troy	2d "	1850
Alonzo S. Ball*	New York	3d "	1850
Lyman Clary*	Syracuse	1st "	1851
George W. Lewis	Buffalo	3d "	1851
Alonzo S. Ball*	New York	1st "	1852
E. L. Coburn*	Ghent	2d "	1852
Dufee Chase*	Palmyra	3d "	1852
N. H. Warner*	Buffalo	1st "	1853
F. Humphreys†	New York	2d "	1853
Samuel S. Guy	Brooklyn	2d "	1853
Lucien B. Wells	Utica	3d "	1853
Henry Adams*	Cohoes	1st "	1854
Josiah Bowers*	New York	2d "	1854
E. T. Richardson	Brooklyn	3d "	1854
M. M. Mathews*	Rochester	1st "	1855
R. S. Bryan*	Troy	2d "	1855
David Springsteed	Albany	3d "	1855
J. M. Quinn*	New York	1st "	1856
Henry Adams*	Cohoes	2d "	1856
Lucien B. Wells	Utica	3d "	1856
Abijah P. Cook	Hudson	1st "	1857
Lucien B. Wells	Utica	2d "	1857
Simion A. Cook*	Troy	1st "	1861
A. R. Wright	Buffalo	2d "	1861
Cornelius Ormes	Jamestown	3d "	1861

*Deceased. †Expelled.

Dr. A. R. Wright	Buffalo	1st	Vice-President,	1862
Erastus A. Munger*	Waterville	2d	"	1862
Wm. S. Searle	Troy	3d	"	1862
William Wright*	Brooklyn	1st	"	1863
C. W. Boyce	Auburn	2d	"	1863
Asa S. Couch	Fredonia	3d	"	1863
Samuel S. Guy	Brooklyn	1st	"	1864
A. R. Morgan	New York	2d	"	1864
Asa S. Couch	Fredonia	3d	"	1864
Benj. F. Cornell*	Fort Edward	1st	"	1865
Benj. F. Bowers*	New York	2d	"	1865
Lorenzo M. Kenyon	Buffalo	3d	"	1865
Lucien B. Wells	Utica	1st	"	1866
Wm. B. Stebbins	Little Falls	2d	"	1866
Edgar B. Cole*	Waterford	3d	"	1866
S. B. Barlow*	New York	1st	"	1867
Wm. H. Watson	Utica	2d	"	1867
Lester M. Pratt	Albany	3d	"	1867
T. F. Allen	New York	1st	"	1868
T. L. Brown	Binghamton	2d	"	1868
B. F. Bishop	Lockport	3d	"	1868
E. B. Holmes	Canandaigua	1st	"	1869
Henry Minton	Brooklyn	2d	"	1869
Ezra P. K. Smith*	Auburn	3d	"	1869
Edwin H. Hurd	Rochester	1st	"	1870
Ezra P. K. Smith*	Auburn	2d	"	1870
T. Franklin Smith	Harlem	3d	"	1870
T. Franklin Smith	Harlem	1st	"	1871
J. C. Reymond	Utica	2d	"	1871
A. W. Holden	Glen's Falls	3d	"	1871
Charles Sumner	Rochester	1st	"	1872
H. S. Hutchins	Batavia	2d	"	1872
G. L. Gifford	Hamilton	3d	"	1872
D. F. Bishop	Lockport	1st	"	1873
J. R. White	New York	2d	"	1873
R. E. Miller	Oxford	3d	"	1873
A. E. Sumner	Brooklyn	1st	"	1874
S. C. Knickerbocker	Watertown	2d	"	1874
Henry Sayles*	Elmira	3d	"	1874
E. M. Kellogg	New York	1st	"	1875
H. V. Miller*	Syracuse	2d	"	1875
R. S. Bishop	Medina	3d	"	1875
A. R. Wright	Buffalo	1st	"	1876
Wm. Gulick	Watkins	2d	"	1876
Henry R. Stiles	Middletown	3d	"	1876
Wm. Gulick	Watkins	1st	"	1877
Henry R. Stiles	New York	2d	"	1877
H. D. Brown	Potsdam	3d	"	1877
A. R. Wright	Buffalo	1st	"	1878

*Deceased.

Dr. W. M. L. Fiske	Brooklyn	2d	Vice-President,	1878
A. P. Throop	Poughkeepsie	3d	"	1878
Alfred K. Hills	New York	1st	"	1879
E. Hasbrouck	Brooklyn	2d	"	1879
J. J. Mitchell	Newburg	3d	"	1879
E. Hasbrouck	Brooklyn	1st	"	1880
N. Osborne	Buffalo	2d	"	1880
R. A. Adams	Rochester	3d	"	1880
J. J. Mitchell	Newburg	1st	"	1881
A. J. Frantz	Geneva	2d	"	1881
G. W. Peer	Rochester	3d	"	1881

SECRETARIES.

Dr. Henry D. Paine, Secretary	New York	1850–57
H. B. Fellows, Corresponding Sec.	Chicago, Ill.	1864–66
H. B. Fellows, Recording Sec.	"	1867
E. D. Jones, Cor. Sec., 140 State st.	Albany	1867–73
H. M. Paine, Rec. Sec., 104 State st.	"	1861–66, '68–73
F. L. Vincent, " 17 Second st.	Troy	1873–74
L. M. Pratt, C. Sec., Columbia st.	Albany	1873–74–75–76
Alfred K. Hills, R. Sec., 33 W. 23d	New York	1876–77–78
H. L. Waldo, Corresponding Sec.	West Troy	1877–78
H. L. Waldo, Recording "	"	1879–80
A. P. Hollett, Corresponding "	Havana	1879–80
A. P. Hollett, Recording "	"	1881
C. E. Jones, Corresponding "	Albany	1881

TREASURERS.

Dr. Henry D. Paine	New York	1850–56
James W. Cox	Albany	1857–61
Lucien B. Wells	Utica	1862–65
John S. Delevan	Albany	1866
J. W. Cox	"	1867
W. S. Searle	Brooklyn	1868–70
James F. McKown	Albany	1871
Nelson Hunting	"	1872–73
Frank L. Vincent, 17 Second st.	Troy	1873–76
E. Darwin Jones	Albany	1874–75
Edward S. Coburn	Troy	1877–78–79–80–81

*Deceased.

CVII.

List of Honorary Members.

"The Society may elect honorary members, non-residents of this State, not to exceed six in number in any one year, the names of such persons having been presented at least one year previous to their election. Honorary members shall not be entitled to vote at the meetings of the Society, or be subject to taxation."—*Extract from the By-Laws.*

1864.

Constantine Hering,* M. D., 112 N. 11th st., Philadelphia, Penn.
I. T. Talbot, M. D., Boston, Mass.
E. C. Witherill,* M. D., Cincinnati, Ohio.

1865.

Gaylord D. Beebe, M. D., 861 Prairie avenue, Chicago, Ill.
Edwin M. Hale, M. D., 65 Twenty-second street, Chicago, Ill.
A. H. Okie, M. D., Providence, R. I.
John C. Saunders, M. D., Cleveland Ohio.
David Wilson, M. D., 62 Brook street, W. London, England.

1866.

Elial T. Foote,* M. D., New Haven, Conn.
Samuel Gregg,* M. D., Boston, Mass.
Charles T. Harris, M. D., Ypsilanti, Mich.
William E. Payne,* M. D., Bath, Maine.
Francis Sims, M. D., 709 Pine street, Philadelphia, Penn.
David S. Smith, M. D., 402 Michigan avenue, Chicago, Ill.

1867.

Walter Williamson,* M. D., Philadelphia, Penn.
Ira Barrows, M. D., Providence, R. I.
Robert E. Dudgeon, M. D., 53 Montague square, W. London, Eng.
E. C. Franklin, M. D., 709 Pine street, St. Louis, Mo.
William F. Jackson, M. D., 84 Dudley street, Boston, Mass.
Alvin E. Small, M. D., 583 Wabash avenue, Chicago, Ill.

1868.

Charles Cropper, M. D., Lebanon, Ohio.
Charles Cullis, M. D., 16 Somerset street, Boston, Mass.
Edwin R. Heath, M. D., ———, Kansas.
William H. Holcomb, M. D., New Orleans, La.
Bushrod W. James, M. D., 1821 Green street, Philadelphia, Penn.

1869.

William Bayes, M. D., 58 Brook street, Grosvenor square, W. London, England.

*Deceased.

T. Cation Duncan, M. D., 287 West Randolph street, Chicago, Ill.
William Henderson, M. D., 19 Ainslie place, Edinburgh, Scotland.
John C. Morgan, M. D., 1700 Chestnut street, Philadelphia, Penn.

1870.

John Drummond, M. D. Montague House, Manchester, England.
John J. Drysdale, M. D., 36 A. Rodney street, Liverpool, England.
John J. Edic, M. D., 134 Shawnee street, Leavenworth, Kansas.
——— Von Grauvogle,* M. D., 10 Gluckstrasse, Munich, Bavaria.
H. R. Madden, M. D., 30 Carlton Hill, St. John's Wood, N. W. London, England.
D. G. Woodvine, M. D., 739 Tremont street, Boston, Mass.

1871.

C. Hempel, M. D., St. Petersburg, Russia.
B. Hirshel, M. D., Dresden, Saxony.
Alfred C. Pope, M. D., Moselle villa, Lee road, Lee, England.
Mathias Roth, M. D., 48 Wimpole street, W. London, England.
Robert J. McClatchey, M. D., 918 North Tenth street, Philadelphia, Penn.

1872.

C. G. McKnight, M. D., Providence, R. I.
W. W. Rodman, M. D., New Haven, Conn.

1873.

E. H. Ruddock, M. D., 2 Finsbury Circus, London, England.
L de V. Wilder, M. D., Hartford, Conn.
F. B. Mandeville, M. D., 940 Broad street, Newark, N. J.
Samuel Worcester, M. D., Burlington, Vt.

1874.

Leverett Bishop, M. D., Sauquoit, N. Y.
R. Ludlam, M. D., Chicago, Ill.

1875.

G. E. E. Sparhawk, Gayville.

1876.

G. W. Swazy, Springfield, Mass.
J. H. Pulte, Cincinnati, Ohio.

1878.

Thos. Skinner, M. D., 64 Upper Parliament street, Liverpool, Eng.

1879.

E. G. Cook, M. D., 103 State street, Chicago, Ill.
H. A. Houghton, M. D., 193 Main street, Charlestown, Mass.

*Deceased.

1880.

E. A. Guilbut, M. D., Dubuque, Iowa.
H. N. Guernsey, M. D., 1423 Chestnut street, Philadelphia, Penn.

1881.

J. P. Dake, M. D., Nashville, Tenn.
W. L. Breyfogle, M. D., 213 Third Street, Louisville, Ky.
Samuel Potter, M. D., Milwaukee, Wis.
F. D. Durkee, M. D., 17 Dupont Street, San Francisco, Cal.
John C. Budlong, M. D., Centredale, R. I.
J. H. Gallinger, M. D., Concord, N. H.

CVIII.

List of Permanent Members of the Homœopathic Medical Society of the State of New York.

		YEAR ELECTED.	DISTRICT.
Adams,* H. F.	Canastota,	1868	6
Allen, T. F.	New York,	1779	1
Avery, H, N.	St. Paul, Minn.,	1870	2
Bacon, Charles A.	New York,	1879	1
Baker, C. C.	Batavia,	1873	8
Ball,* Alonzo S.	New York,	1863	1
Ball, Jay	Cortland,	1873	6
Barlow,* Samuel B.	New York,	1864	1
Barnes, W. H.	Chatham,	1872	3
Bass, E. C.	Cazenovia,	1870	6
Baxter,* W.	Wappinger's Falls,	1872	2
Beach, G. H.	San Francisco,	1870	4
Beers,* Alfred H.	Buffalo,	1868	8
Belcher, Geo. E.	New York,	1868	1
Benedict,* H. S.	Corning,	1863	7
Bennett, H. K.	Fitchburg, Mass.,	1872	4
Biegler, J. A.	Rochester,	1879	7
Bigelow, J. G.	Syracuse,	1866	5
Billings, G. H.	Cohoes,	1875	3
Bishop, D. F.	Lockport,	1854	8
Bishop, R. S.	Medina,	1867	8
Blodgett, T. S.	Cooperstown	1864	6
Bloss. R. D.	Troy,	1865	3
Blumenthal, C. E.	New York,	1878	1
Bonnell, C. L.	Brooklyn,	1879	2
Bowers,* Benj. F.	New York,	1866	3
Boyce, C. W.	Auburn,	1863	7
Bradner, Ira S.	Middletown,	1876	2

*Deceased.

Brown, H. D.	Potsdam,	1873	4
Brown, Titus L.	Binghamton,	1863	6
Brown, W. B.	Palmyra,	1871	7
Bryan, E. W.	Corning,	1880	7
Bryan,* W. J.	Corning,	1873	7
Bull, A. T.	Buffalo,	1870	8
Bullard, David H.	Glenn's Falls,	1864	4
Burdick, S. P.	New York,	1874	1
Burghaus,* Alex.	New York,	1877	1
Burke,* A. C.	New York,	1867	1
Butler, Wm. M.	Middletown,	1881	2
Cadmus,* James M.	Waverly,	1873	6
Calkins, T. T.	Hudson,	1868	3
Campbell, M. W.	Troy,	1868	3
Carpenter, C. H.	Troy,	1869	3
Carroll, S. H.	Albany,	1874	3
Church, Charles A.	Paasaic, N. J.,	1876	6
Clark, C. G.	Troy,	1870	3
Clark, L. A.	Cambridge,	1879	4
Clary,* Lyman	Syracuse,	1866	5
Coburn, E. S.	Troy,	1874	3
Cole,* E. B.	Waterford,	1867	4
Cook, A. P.	Hudson,	1863	3
Cook, C. P.	Hudson,	1872	3
Cook, E. G.	Chicago, Ill.,	1869	8
Cornell,* Benjiman F.	Fort Edward,	1863	4
Couch, Asa S.	Fredonia,	1864	8
Covert, N. B.	Geneva,	1878	7
Cox, G. A.	Albany,	1878	3
Cox, J. W.	Albany,	1869	3
Crispell,* G. D.	Kingston,	1867	3
Cromwell,* James	Lake George,	1872	4
Dayfoot, H. M.	Mt. Morris,	1881	6
Delavan, J. Savage	Albany,	1871	3
Doane, W. C.	Williamsport, Penn.,	1877	5
Doty,* Hylon	Canandaigua,	1870	7
Doughty, F. E.	New York,	1877	1
Dowling, J. W.	New York,	1873	1
Dunham,* Carroll	Irvington,	1865	2
Elliott, J. B.	Brooklyn,	1878	2
Everett, Daniel L.	Brooklyn,	1867	2
Farley, C. J.	Swanton, Vt.,	1877	4
Fellows, H. B.	Chicago, Ill.,	1865	7
Finch, Joseph	New York,	1881	1
Fiske, W. M. L.	Brooklyn,	1875	2
Flagg, L. W.	Yonkers,	1879	2
Foote, G. F.	Stamford, Conn.,	1873	2
Foster, H.	Buffalo,	1872	8
Fowler, E. P.	New York	1869	1

*Deceased.

Fowler, Wm. P.	Rochester,	1876	7
Freeman,* Warren	New York,	1880	1
Gardner,* M. M.	Utica,	1866	5
Gifford, G. A.	Clayville,	1875	5
Gifford, G. L.	Hamilton,	1868	6
Goewey, Catharine E.	Albany,	1880	3
Grant, B. F.	Bath,	1874	7
Gray, John F.	New York,	1866	1
Gray,* P. W.	Elmira,	1865	6
Greely, G. H.	Syracuse,	1879	5
Gregg, R. R.	Buffalo,	1865	8
Guernsey, Egbert	New York,	1865	1
Gulick, Wm.	Watkins,	1865	6
Guy, Samuel S.	Brooklyn,	1865	2
Gwynn, W. M.	Throopsville,	1870	7
Hall, G. A.	Chicago, Ill.,	1868	8
Hallock, Lewis	New York,	1867	1
Hand,* S. D.	Binghamton,	1869	6
Hanford, Samuel C.	Brooklyn,	1868	2
Hasbrouck, E.	Brooklyn,	1873	2
Haviland, N. H.	Fulton,	1880	5
Hawley, William A.	Syracuse,	1866	5
Helmuth, William Tod	New York,	1873	1
Hibbard, G. C.	Adams,	1868	5
Hill, C. Judson	Utica,	1869	5
Hills, A. K.	New York,	1866	1
Holden, A. W.	Glen's Falls,	1879	4
Hollett, A. P.	Havana,	1875	6
Houghton, H. A.	Charlestown, Mass.	1865	4
Houghton, H. C.	New York,	1875	1
Holmes,† E. B.	Canandaigua,	1869	7
Hoxsie, A. C.	Buffalo,	1877	8
Hull,* A. C.	Brooklyn,	1869	2
Hulst, P. J.	Greenwich,	1877	4
Hunt,* F. W.	New York,	1867	1
Hunting, N.	Albany,	1872	3
Hurd, E. H.	Rochester,	1868	7
Hurd*, George F.	Rochester,	1875	7
Hutchins, H. S.	Batavia,	1870	8
Ingalls, F. W.	Kingston,	1870	3
Jones, C. E.	Albany,	1878	3
Jones, E. D.	Albany,	1864	3
Joslyn, B. F.	New York,	1868	1
Kellogg, E. M.	New York,	1866	1
Kenyon, L. M.	Buffalo,	1866	8
Knickerbocker, S. C.	Watertown,	1870	5
Lansing,* Benj.	Rhinebeck,	1874	2
Lawrence, Charles M.	Port Jervis,	1877	2
Lewis, F. Park	Buffalo,	1881	8

*Deceased. †Resigned.

Lewis, G. W.	Buffalo,	1869	8
Liebold, C. Th.	New York,	1878	1
Lilienthal, S.	New York,	1872	1
Linsley, John S.	New York,	1876	1
Little, G. W.	Fort Edward,	1873	4
Loomis, Edward	Oneida,	1872	6
Loomis, D. D.	Bay City, Mich.,	1867	6
Lord,* I. S. P.	Brooklyn,	1869	2
Low, C. E.	Plattsburg,	1878	4
Lowrey, Charles	Hannibal, Mo.,	1868	6
Mathews,* M. M.	Rochester,	1868	7
McKown, J. F.	Albany,	1871	3
McManus, G. D.	Oswego,	1869	5
McMurray, Rob't	New York,	1871	1
Milbank, W. E.	Albany,	1879	3
Millard, H. B.	New York,	1870	1
Miller,* H. V.	Syracuse	1871	5
Miller, Isaac	Delhi,	1881	6
Miller, J. F.	Newark, N. J.	1871	4
Miller, R. E.	Oxford,	1871	6
Minor, J. C.	New York,	1875	1
Minton, Henry	Brooklyn,	1864	2
Mitchell, J. J.	Newburg,	1880	2
Moffat, R. C.	Brooklyn,	1863	2
Morgan, A. R.	New York,	1866	1
Mosher, Charles M.	Easton,	1863	4
Morrill,* H. E.	Brooklyn,	1870	2
Mull, P. W.	Ghent,	1876	3
Munger,* E. A.	Waterville,	1863	5
Noble, G. Z.	Dundee,	1864	7
Ormes, C.	Jamestown,	1871	8
Osborne, N.	Buffalo,	1879	8
Owen, Ira C.	Sherburne,	1867	6
Paine, Henry D.	New York,	1863	1
Paine, H. M.	Albany,	1864	3
Palmer, George B.	East Hamilton,	1867	6
Pearsall, S. J.	Saratoga Springs,	1866	4
Peer, G. W.	Rochester,	1872	7
Peckham, J. J.	Albany,	1881	3
Perrine, W. L. R.	Brooklyn,	1876	2
Pettit, T. J.	Fort Plain,	1871	4
Phillips, J. S.	Catskill,	1881	3
Pool, Agustus	Oswego,	1867	5
Potter,* E. A.	Oswego,	1865	5
Pratt, L. M.	Albany,	1864	3
Preston, H. G.	Brooklyn,	1875	2
Randel, W. H.	Albany,	1873	3
Raymond,† J. C.	Oakland, Cal.,	1867	5

*Deceased. †Resigned.

Reynolds, P. L. F.	Albany,	1875	3
Rice, A. B.	Panama,	1881	8
Richardson, E. T.	Brooklyn,	1865	2
Rogers, E. W.	Crystal Springs,	1879	7
Sarles,* John	Brooklyn,	1866	2
Sayles,* Henry	Elmira,	1874	6
Schenck, B. B.	Plainville,	1868	5
Sherzer, William	New York,	1880	1
Searles, William S.	Brooklyn,	1865	2
Seeley, N. R.	Elmira,	1871	6
Shafer, Levi	Kingston,	1874	3
Shattuck,* Alvin	Buffalo,	1871	8
Smith,* D. D.	New York,	1864	1
Smith,* E. P. K.	Auburn,	1869	7
Smith, Henry M.	New York,	1865	1
Smith, T. F.	New York,	1871	1
Southwick, A. B.	Rome,	1871	5
Southwick, D. E.	Ogdensburgh,	1867	4
Spencer,* N.	Winfield,	1872	5
Squires,* E. B.	Syracuse,	1879	5
Stebbins, J. H.	Geneva,	1871	7
Stebbins, W. B.	Little Falls,	1872	5
Stiles, S. E.	Brooklyn,	1880	2
Storm, W. E.	Wilmington, N. C.,	1879	4
Stowe,† T. D.	Syracuse,	1865	5
Sumner, A. E.	Brooklyn,	1874	2
Sumner, Charles	Rochester,	1873	7
Sweeting, M. F.	South Butler,	1867	7
Swift, C. E.	Auburn,	1870	7
Swits, H.	Schenectady,	1868	4
Talcott, S. H.	Middletown,	1874	5
Terry, M. O.	Utica,	1876	5
Throop, A. P.	Poughkeepsie,	1874	2
Vanderburg, D. W.	Fall River, Mass.,	1873	5
VanDerzee, William H.	Albany,	1880	3
Vincent, F. L.	Troy,	1873	3
Voak, J. B.	Canandaigua,	1879	7
Waldo, H. L.	West Troy,	1879	3
Waldo,* L. B.	West Troy,	1870	3
Wallace, A. E.	Oneida,	1869	6
Ward, H. I.	North Granville,	1869	4
Warren, S. C.	Jordan,	1865	5
Watson, William H.	Utica,	1866	5
Wellman, W. I.	New York,	1879	1
Wells, L. B.	Utica,	1864	5
Wells, P. P.	Brooklyn,	1863	2
White, J. N.	Amsterdam,	1870	4
White, J. Ralsey	New York,	1863	1

*Deceased. †Resigned.

White, T. C.	Rochester,	1872	7
White, Wm. Hanford	New York,	1881	1
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Woodbury, W. L.	Fulton,	1875	5
Woolcott,* W. G.	Whitehall,	1866	4
Wright,* Albert	Brooklyn,	1866	2
Wright, A. R.	Buffalo,	1863	8
Wright*, William	Brooklyn,	1864	2

CIX.

List of Delegates to the Homœopathic Medical Society of the State of New York.

CLASS I.

Term expires at the close of the annual meeting in February, 1882.

Albany County Homœopathic Medical Society, four delegates: Drs. Wm. H. Van Derzee, Geo. E. Gorham, Catharine E. Goewey, J. J. Peckham, Albany.

Cayuga County Homœopathic Medical Society, two delegates.

State Board of Medical Examiners—Dr. C. A. Bacon, New York.

Chautauqua and Cattaraugus Counties Homœopathic Medical Society, four delegates: Drs. H. Learned, Cuba; C. P. Alling, Bradford, Pa.; A. B. Rice, Panama; M. J Lincoln, Olean.

Chemung County Homœopathic Medical Society, one delegate: Dr. O. Groom, Horseheads.

Chenango County Homœopathic Medical Society, one delegate: Dr. S. J. Fulton, Norwich.

Columbia County Homœopathic Medical Society, two delegates: Dr. Robert Boocock, Coxsackie.

Dutchess County Homœopathic Medical Society, two delegates: Drs. Anna C. Howland, Poughkeepsie; W. R. Case, Salt Point.

Erie County Homœopathic Medical Society, five delegates: Drs. N. Osborne, J. D. C. Heinemann, H. E. Colton, W. B. Kenyon, H. Baethig, Buffalo.

Buffalo Homœopathic Hospital—Dr. F. Park Lewis.

CLASS. II.

Term expires at the close of the annual meeting in February, 1873.

Kings County Homœopathic Medical Society, twelve delegates: Drs. M. F. Hein, 139 St. James Place, Brooklyn; Helene S. Lassen, 77 Henry Street, Brooklyn; J. F. Atwood, 307 Cumberland Street, Brooklyn;

*Deceased.

Samuel Talmage, 20 Schemerhorn Street, Brooklyn, J. L. Watson, 9 Elm Place, W. W. Blackman, 15 Greene Avenue, Brooklyn; E. H. Ashwin, 97 Kent Street, Greenpoint; H. W. Richter, 431 Henry Street, Brooklyn; D. K. Mandeville, 17 Putnam Avenue.

Livingston County Homœopathic Medical Society, one delegate: Dr. W. W. Russell, Hemlock Lake.

Madison County Homœopathic Medical Society, two delegates: Dr. E. P. Hussy, Canastota.

Monroe County Homœopathic Medical Society, three delegates: Drs. Allen B. Carr, Rochester; R. A. Adams, Rochester.

Montgomery County Homœopathic Medical Society, one delegate: Dr. Lewis Faust, Schenectady.

Niagara and Orleans Counties Homœopathic Medical Society, three delegates: Drs. R. S. Bishop, Medina; W. V. R. Blighton, Tonawanda.

Oneida County Homœopathic Medical Society, four delegates: Drs. N. C. Scudder, Camden; Arthur Beach, Ilion; H. J. Spencer, West Winfield; Geo. Allen, Waterville.

Onondaga County Homœopathic Medical Society, three delegates: Drs. A. B. Kinne, Syracuse; C. P. Jennings, Syracuse; C. D. Hale, Syracuse.

Ontario and Yates Counties Homœopathic Medical Society, two delegates: Drs. J. B. Voak, Canandaigua; N. B. Covert, Geneva.

CLASS III.

Term expires at the close of the annual meeting in February, 1884.

New York County Homœopathic Medical Society, twenty-one delegates: Drs. C. A. Bacon, 104 East 35th Street; J. R. Wood, 62 West 17th Street; Clara C. Plimpton, 122 Lexington Avenue; Alfred J. Bigelow, Morrisania; Wm. Scherzer, 31 West 31st Street; H. Amelia Wright, 223 West 34th Street; J. B. Gilbert, 23 West 37th Street; Thomas Wildes, 35 West 31st Street; J. H. Demarest, 111 East 127th Street; C. B. Currier, 972 Lexington Avenue; William Brink, 55 East 21st Street; G. C. Brown, 28 East 22d Street; E. Carleton, Jr., 58 West 9th Street; Samuel Swan, 13 West 38th Street; H. H. Tinker, Morrisania; Arthur T. Hills, 39 West 36 Street; H. I. Ostrom, 229 West 23d Street; C. E. Campbell, 314 East 18th Street; A. M. Piersons, 24 East 127th Street; Bukk G. Carleton, 166 West 34th Street, Mrs. J. G. Brinkman, 172 West 23d Street; Geo. S. Norton, 154 West 34th Street; H. M. Hitchcock, 20 East 42d Street; F. H. Boynton, 151 Lexington Avenue.

Hospital of the Five Points House of Industry, one delegate: Dr. Hugh M. Smith.

Hospital of Protestant Half Orphan Asylum, one delegate: Dr. A. M. Woodward, 52 West 29th Sreet, New York.

Hahnemann Hospital, one delegate: Dr. Geo. M. Dillow, 36 West 27th Street, New York.

Ophthalmic Hospital, one delegate: Dr. Geo. S. Norton, 154 West 34th Street, New York.

Harlem Homœopathic Dispensary, one delegate.

Dispensary of the Homœopathic Medical College, one delegate: Dr. Thomas Wildes, 35 West 31st Street.

Dispensary of the N. Y. Medical College for Women, one delegate Dr. Mary E. Bond, 122 Lexington Avenue, New York.

New York Homœopathic Dispensary, one delegate.

North-Eastern Homœopathic Dispensary, one delegate: Dr. F. Seeger, 718 Lexington Avenue, New York.

Western Homœopathic Dispensary, one delegate: Dr. H. Rickaby, 258 West 42 Street, New York.

Yorkville Homœopathic Dispensary, one delegate: Dr. Benjamin Wilson.

New York Homœopathic Medical College, one delegate: Dr. J. W. Dowling, 313 Madison Avenue, New York.

New York Medical College for Women, one delegate: Dr. C. S Lozier, 221 West 14th Street, New York.

School of the New York Ophthalmic Hospital, one delegate: Dr. C. Th. Liebold, 21 West 30th Street, New York.

CLASS IV.

Term expires at the close of the annual meeting in February, 1885.

Orange County Homœopathic Medical Society, two delegates: Drs. J. W. Ostrom, Goshen; C. Spencer Kinney, Middletown.

State Homœopathic Asylum for the Insane—Dr. Selden H. Talcott, Middletown.

Oswego County Homœopathic Medical Society, three delegates: Drs. N. H. Haviland, Fulton; C. W. Radway, Mexico.

Otsego County Homœopathic Medical Society, two delegates

Queens County Homœopathic Medical Society, two delegates: Drs. C. A. Belden, Jamaica; W. A. Allen, Flushing.

Rensselaer County Homœopathic Medical Society, three Delegates: Dr. M. L. Dowdell, 73 Third Street, Troy.

Saratoga County Homœopathic Medical Society, two delegates.

Schuyler County Homœopathic Medical Society, one delegate: Dr. F. W. Adriance, Watkins.

Seneca County Homœopathic Medical Society, one delegate: Dr. A. J. Frantz, Geneva.

Steuben County Homœopathic Medical Society, two delegates: Drs. B. F. Grant, Bath: W. D. Saxton, Cohocton; W. S. Purdy, Corning.

St. Lawrence County Homœopathic Medical Society, three delegates: Dr. S. Hoag, Canton.

Tompkins County Medical Society, one delegate: Dr. E. J. Morgan, Jr.

Ulster County Homœopathic Medical Society, three delegates.

Washington and Warren Counties Homoeopathic Medical Society, three delegates: Drs. C. A. Clark, Cambridge; C. T. Mosher, Easton; A. W. Holden, Glen's Falls.

Wayne County Homœopathic Medical Society, two delegates.

Westchester County Homoeopathic Medical Society, three delegates: Drs. L. W. Flagg, Yonkers; S. M. Griffin, Cold Spring.

CX.

List of Physicians upon whom the Honorary Degree of Doctor of Medicine has been Conferred by the Regents of the State upon Recommendation of the State Homœopathic Medical Society.

1863.

Dr. Frederick F. Stamm, of Brooklyn.

1867.

Dr. M. M. Mathews, of Rochester.

1872.

Drs. Alfred W. Gray, Milwaukie, Wisconsin; Casper Bruchhausen, Norwich, N. Y.; Wm. B. Reeve, Quogue, N. Y.

1875.

Dr. Constantine Hering, Philadelphia, Pa.

1876.

Dr. John F. Gray, New York.

1877.

Drs. Carroll Dunham, Irvington; H. V. Miller, Syracuse; Wm. H. Watson, Utica; Wm. Gulick, Watkins.

1878.

Drs. E. Guernsey, New York; Charles Sumner, Rochester; E. P. Fowler, New York; C. Ormes, Jamestown.

1879.

Drs. A. W. Holden, Glen's Falls; Asa S. Couch, Fredona; L. M. Pratt, Albany; Edward Bayard, New York.

1880.

Drs. A. R. Wright, Buffalo; O. Groom, Horseheads; Henry Minton, Brooklyn; W. C. Doane, Syracuse.

1881.

Drs. H. M. Paine, Albany; E. H. Hurd, Rochester; A. S. Ball, New York; C. T. Harris, Syracuse.

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